

Date of Notice: January 3, 2019

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
RHODE ISLAND DEPARTMENT OF HEALTH**

PUBLIC NOTICE

Public Hearing IN RE: Petition to add Opioid Dependency as a debilitating medical condition pursuant to R.I. Gen. Laws § 21-28.6-5.

The Director of the Rhode Island Department of Health (“RIDOH”) has under consideration a Petition to add Opioid Dependency as a debilitating medical condition pursuant to Rhode Island General Laws § 21-28.6-5 (“R.I. Gen. Laws § 21-28.6-5”). This Petition, dated October 24, 2018, was received by RIDOH on October 24, 2018. A copy of this Petition is attached to this Notice of Public Hearing (“Notice”).

Pursuant to R.I. Gen. Laws § 21-28.6-5, the Department shall hold a public hearing (“Hearing”) on **February 6, 2019, 10:00 AM at the Rhode Island Department of Health Auditorium, Lower Level, 3 Capitol Hill, Providence, RI, 02908**, at which time and place all persons interested therein will be heard. Pursuant to R.I. Gen. Laws § 21-28.6-5, RIDOH, in considering such petitions shall include public notice of, and an opportunity to comment in a public hearing, upon such petitions.

The Hearing Officer will limit testimony to the specific request included in the attached Petition. Testimony regarding any other aspects of the Medical Marijuana Program and/or the regulations thereof will not be accepted at this time. The seating capacity of the room will be enforced and therefore the number of persons participating in the hearing may be limited at any time by the Hearing Officer, in order to comply with safety and fire codes.

RIDOH is accessible. If communication assistance is needed, or any other accommodation to ensure equal participation, please call RI Relay 711 at least three (3) business days in advance of the Hearing so arrangements can be made to provide such assistance at no cost to the person requesting it.

Written comments may be directed to Paula Pullano, Rhode Island Department of Health, 3 Capitol Hill, Providence, Rhode Island 02908 or by e-mail at paula.pullano@health.ri.gov either before or on the day of the Hearing. Written comments received after the **close of business (5:00 PM) on February 6, 2019** will not be accepted. Persons intending to present comments at the Hearing are encouraged to bring a written copy of their testimony, if possible, to be included in the record of public comments.



B & B Medical Marijuana Evaluation Center

October 24, 2018

Petition to add Opioid Dependency as a qualifying condition to the Rhode Island Medical Marijuana Program.

B & B Consulting, LLC is writing in regards to the national epidemic opioid crisis we are facing in America. Opioid overdose is now the leading cause of all deaths in the United States. Studies have shown that up to 65% of older adults who use Medical Marijuana significantly reduces their chronic pain and dependency on opioids.

In 2009, Rhode Island had 138 unintentional deaths that were opioid related, 78% of which was from prescription drugs. In 2016, Rhode Island had 336 unintentional opioid related deaths, an increase of 143% from 2009. Since 2016 we continue to see a constant increase in opioid related deaths.

By implementing Opioid dependency as a qualifying condition, the goal would be to offer effective alternative treatment options and to reduce the number of opioid deaths by 25% or more.

According to *Journal of the American Medical Association, Internal Medicine*, between 2010 and 2015, under Medicare Part D a study found that states with medical cannabis dispensaries and home grow had a reduction of 14.4% in use of prescription opioids and nearly a 7% reduction in filled opioid prescriptions.

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Jama Internal Med 2018;118(10):1800-1802 by Ed Praetorian, shows that a study conducted with Medicare Part D patients, between 2010 and 2015 resulted in 23.08 million daily doses of any opioid were dispensed per year. In states with active dispensaries and home cultivation showed a 3.7 million reduction in opioid daily doses dispensed per year.

There are currently three Medical Marijuana states that have passed Opioid Dependency as a qualifying condition: New York, Illinois and Pennsylvania.

New York implemented Opioid Dependency into their Medical Marijuana program when studies found that the number of overdose deaths involving opioids increased from 1,000 deaths in 2010, to over 3,000 deaths in 2016. A devastating 200% increase! By implementing Opioid dependency, their goal is to reduce the number of opioid related deaths.

Illinois has implemented Opioid dependency as a qualifying condition to their medical marijuana program. In 2016 a reported 1,946 opioid related deaths occurred. This is 1.5 times the homicide related death rate and 2 times the fatal car crash death rates. Opioid related deaths increased 82% between 2013 and 2016. Their overall goal is to save lives and reduce opioid related deaths by 33% in three years.

Pennsylvania's implementation of opioid dependency as a qualifying condition to the medical marijuana program is fairly new with limited studies available. However, they have found a 14% decline in opioid prescriptions since the medical marijuana program was implemented in 2016.

We believe this would be another tool added to the Department of Health in addition to the Drug overdose program, Good Samaritan law and the PMP monitoring database. With education, rehabilitation, and accessible prescription/sharps drop box's at locations such as hospitals, police stations and

fire stations, we believe we will see a significant reduction in opioid related deaths.
In conclusion, our goal is to save lives and offer effective alternative treatment options for opioid dependency.

Sincerely,

Thomas Rocco, MD

Medical Director


Jessica Cotton

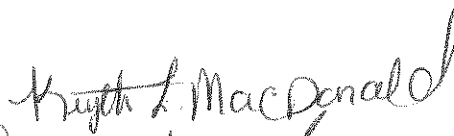
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By Ashley C. Bradford and W. David Bradford

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Medical Marijuana Laws Reduce Prescription Medication Use In Medicare Part D

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ABSTRACT Legalization of medical marijuana has been one of the most controversial areas of state policy change over the past twenty years. However, little is known about whether medical marijuana is being used clinically to any significant degree. Using data on all prescriptions filled by Medicare Part D enrollees from 2010 to 2013, we found that the use of prescription drugs for which marijuana could serve as a clinical alternative fell significantly, once a medical marijuana law was implemented. National overall reductions in Medicare program and enrollee spending when states implemented medical marijuana laws were estimated to be \$165.2 million per year in 2013. The availability of medical marijuana has a significant effect on prescribing patterns and spending in Medicare Part D.

In the past twenty years, the drive in many states to legalize medical marijuana has gained widespread public attention, though there has been no corresponding change to federal marijuana laws. In the late 1980s evidence began to emerge that the use of marijuana has a positive effect on the lives of many people suffering from a variety of ailments. Nevertheless, marijuana is still federally classified as a Schedule I drug (the most restrictive category, according to the Controlled Substances Act of 1970), which means that it is deemed to have “no currently acceptable medical use in treatment in the United States,” a high potential for abuse, and “a lack of accepted safety for use...under medical supervision.”^{1(p40)} This classification imposes significant barriers not only to obtaining marijuana products for clinical use but also to conducting primary research on the pharmacological and behavioral impacts of marijuana use.

Despite such barriers, twenty-four states and the District of Columbia have adopted laws legalizing the use of marijuana for medical purposes. Surprisingly, although there is a rapidly growing literature about many indirect effects of medical

marijuana laws, almost nothing is known about how these state health policies affect clinical care or spending in the health care sector. In this article we investigate how implementing state-level medical marijuana laws changes prescribing patterns and program and patient expenditures in Medicare Part D for prescription drugs approved by the Food and Drug Administration (FDA).

There is significant variation across state medical marijuana policies.² Every state that currently allows the use of medical marijuana requires a licensed physician to recommend that use and requires that the recommendation be made only if a patient presents with one or more illnesses from a state-approved list.³ Home cultivation of marijuana is sometimes permitted, though every state that passed a medical marijuana law since 2009 has included some form of regulated dispensary program.¹ Some states allow caregivers to distribute marijuana.^{1,4} In addition, the legal possession limit differs greatly across states.⁵

The findings from research on the effects of the medical use of marijuana have been extremely mixed. Historically, opponents of medical marijuana legalization have cited addiction, criminal

activity, marijuana's status as a so-called gateway drug, and marijuana's lack of demonstrated medical value as reasons for keeping the drug illegal.⁵ However, the causal link between the use of marijuana and the use of harder drugs has never been proven definitively, nor has the link between medical marijuana and criminal activity.

In a 2013 study Mark Anderson and coauthors reported that traffic fatalities dropped 8–11 percent following the passage of state medical marijuana legislation.⁶ Sarah Lynne-Landsman and coauthors analyzed data from the Youth Risk Behavior Survey using a difference-in-differences design to estimate the effects of medical marijuana laws on adolescent marijuana use.⁷ That study found no effect on self-reported prevalence or frequency of use. In contrast, Melanie Wall and colleagues reported that states that passed a medical marijuana law had significantly higher rates of marijuana use and abuse among adolescents, compared to states with no such law, though the estimated effects were largely associations.⁸ In a later study that attempted to replicate the results of Wall and colleagues, Sam Harper and coauthors found that when researchers used statistical methods that identified causal effects, the effect of medical marijuana laws on drug use largely disappeared.⁹

These findings are representative of an unsettled literature. Earlier studies did not generally use statistical methods such as those of Harper and coauthors, but later studies did—and the later studies tended to find only insignificant effects or a mix of significant and insignificant ones.

One issue that has received surprisingly little attention is the question of whether medical marijuana is being used clinically to any significant degree. To the extent that physicians recommend the use of marijuana to their patients to manage conditions that it can treat, according to clinical evidence, one would expect marijuana to be primarily a substitute for existing prescription medications (for patients who did not respond to previous therapy or who respond better to marijuana than to previous treatment). Nonetheless, there are no published studies that investigate whether states' approval of medical marijuana changes the prescribing patterns for pharmaceuticals approved by the FDA.

In this study we asked two straightforward questions. First, does implementing a medical marijuana law change prescribing patterns in Medicare Part D for traditional (FDA-approved) drugs that treat conditions marijuana itself might treat? Second, if it does, what is the effect on overall spending—both by Medicare and by enrollees out of pocket—of such changes?

Conceptual Framework

Two competing forces can drive prescription behavior when a medical marijuana law is implemented. The primary effect one expects is that prescribing for FDA-approved drugs will fall when a medical marijuana law is put in place, because marijuana is often a substitute for existing therapies. For most FDA-approved prescription drugs for which medical marijuana can serve as a replacement, we hypothesized that prescribing would decline.

However, this substitution effect model does not account for the secondary effect from demand expansion that might result from the introduction of a new product. When new products are made available, information sets change because of influences such as discussion of the treatment option in the media. Media coverage may draw new patients into physicians' offices, much as direct-to-consumer advertising does.^{10–12} If not all new patients are diverted to marijuana, then prescription drug use might rise, even if those drugs and marijuana are clinical substitutes for each other.

Glaucoma is a notable condition for which demand expansion might swamp substitution. Clinical evidence is very strong that while marijuana sharply reduces intraocular pressure, the effect lasts only about an hour.¹³ As a result, new patients who seek glaucoma treatment after learning about the potential benefits of marijuana are likely to receive a prescription for an FDA-approved drug. The prognosis for untreated glaucoma is very ominous. Thus, we expected that prescribing for glaucoma drugs would remain unchanged or even rise with the implementation of a medical marijuana law.

Study Data And Methods

DATA Our data came from the Medicare Part D Prescription Drug Event Standard Analytic File for the period 2010–13. These data contain information on all prescription drugs paid for under Medicare Part D. Each record in the data represents a specific drug prescribed by a physician in a given year and contains information on the total number of daily doses filled and the total expenditures (the amount paid by Medicare, patients' out-of-pocket expenditures, and any low-income subsidies for deductibles and copayments under the Affordable Care Act). We linked these data to basic information on the prescribing physicians, including sex, specialty, and location of home and business addresses.¹⁴ The baseline data contained more than eighty-seven million physician-drug-year observations.

We restricted the analysis to drugs that treat conditions for which marijuana might be an al-

ternative treatment. We obtained guidance on which conditions were in that category from the states' medical marijuana legislation, which explicitly mentions certain conditions;¹⁵ from summaries of the clinical evidence in a 1999 Institute of Medicine review;¹³ and from a recent comprehensive meta-analysis.¹⁶ We selected nine broad clinical condition categories to study, based on the intersection of this reviewed clinical evidence and the list of conditions mentioned in state medical marijuana laws. A list of these condition categories and information about the clinical evidence for the use of marijuana in treating them appear in Exhibit 1.

Once the relevant condition categories were selected, we had to determine which drugs to study. In clinical practice, patients may be prescribed drugs that have been formally approved by the FDA to treat their diagnosed conditions (an on-label prescription) or drugs that do not have such formal approval (an off-label prescription).¹⁷ If we chose only drugs that were on label, we might have overlooked a large number of drugs that were used to treat the condition categories listed in Exhibit 1.

For our analysis, we extracted data on all drugs that were in a drug class that had at least one on-label option to treat one or more of the condition

EXHIBIT 1

Nine medical condition categories with at least one drug approved by the Food and Drug Administration for on-label use, and level of evidence for marijuana as a treatment for conditions in the category

	Condition category								
	Anxiety	Depression	Glaucoma	Nausea	Pain	Psychosis	Seizures	Sleep disorders	Spasticity
CLINICAL EVIDENCE OF MEDICAL MARIJUANA EFFECT ON CONDITIONS IN EACH CATEGORY									
Institute of Medicine (1999) ^a	Present	— ^b	Insufficient	Present	Present	— ^b	Insufficient	— ^b	Insufficient
Whiting et al. (2015) ^c	Very low	Very low	— ^b	Low	Moderate	Low	— ^b	Low or very low	Low to moderate
DRUG CLASSES WITH AT LEAST ONE ON-LABEL OPTION FOR TREATING CONDITIONS IN EACH CATEGORY									
Adrenal cortical steroids					•				
Analgesics					•		•		
Antiarrhythmic agents					•	•	•	•	
Anticonvulsants	•	•			•	•			
Antidepressants	•	•							
Antidiarrheal agents				•					
Antiemetic or antivertigo agents				•	•				
Antimalarial agents					•				
Antipsychotics		•				•			
Antirheumatics					•				
Anxiolytics, sedatives, and hypnotics	•					•		•	
Central nervous system stimulants								•	
Functional bowel disorder agents					•				•
Immunostimulants					•				•
Muscle relaxants									
Ophthalmic preparations			•						
Proton pump inhibitors				•					
Respiratory inhalant products					•				
Sedatives and hypnotics	•					•		•	
Smoking cessation agents	•	•							

SOURCE Authors' analysis of principal findings in Institute of Medicine, Marijuana and Medicine (Note 13 in text); and Whiting PF, et al. Cannabinoids for Medical Use (Note 16 in text). **NOTES** The nine condition categories were selected based on their inclusion in at least four states' medical marijuana laws and the two comprehensive clinical studies cited in the exhibit. ^aClassifying evidence of effect as either present (without rating the strength of the evidence) or insufficient. ^bNo review of the effects of marijuana were provided for conditions in these categories. ^cClassifying evidence of effect on a scale from moderate to very low.

Our research suggests that more widespread state approval of medical marijuana could provide modest budgetary relief.

categories listed in Exhibit 1. This resulted in a set of both on- and off-label drugs used to treat each of our study condition categories, while excluding off-label drugs that were pharmacologically far removed from the on-label options.

We saved these prescription data in separate analytic data sets, one for each condition category listed in Exhibit 1. We aggregated the data to the physician-year level, so that each line in the data represented the number of daily doses (and associated Medicare program and enrollee out-of-pocket costs) that were filled for all prescriptions written by each physician in the particular condition category each year. The final physician-level analytic data sets, which were aggregations of all Medicare Part D prescriptions for our selected drugs, ranged in size from 588,808 observations for the spasticity diagnosis sample to 2,496,608 observations for the pain diagnosis sample.

More details on the data and data construction methods can be found in the online Appendix.¹⁸

BASIC MODELS The key variable of interest was an indicator of when prescriptions were filled in a state and year with an effective medical marijuana law in place—that is, where it was legal for state residents either to use home-grown marijuana or to purchase marijuana in a dispensary and where such a dispensary was open. Covariates included physician and state characteristics. We also included county-level demographic variables from the Area Health Resources Files that were expected to influence the aggregate demand for drugs dispensed under Medicare Part D.¹⁹

We used a simple difference-in-differences regression framework estimated separately for each of the nine condition categories listed in Exhibit 1. All models were estimated with least squares regressions. Each of the estimated models were corrected for clustering at the physician level. Details of the model variables are included in the Appendix.¹⁸

In addition to estimating changes in prescribing patterns with the implementation of a medical marijuana law, we estimated changes in Medicare Part D payments (including government low-income subsidies for copayments and deductibles) and patients' out-of-pocket spending. Details of how we conducted this analysis can be found in the Appendix.¹⁸

LIMITATIONS Our study had several limitations. First, previous studies have suggested that Medicare patients may make up a relatively small percentage of people who use medical marijuana and that only 13–27 percent of people who used medical marijuana were ages fifty and older.^{20,21} Thus, while our study illuminated the behaviors of a generally older population in response to implementation of medical marijuana laws, future research is needed to understand the prescription drug use responses of younger people.

Second, our study of prescribing behavior at the physician level could not explore important remaining questions about the mechanism of the response. It is certainly plausible that forgoing medications with known safety, efficacy, and dosing profiles in favor of using marijuana (despite its reasonably favorable safety profile) could be harmful under some circumstances. In addition, patients who switch from a prescription drug that requires regular physician monitoring to marijuana, which requires no monitoring, may interact with the health care community less often overall than they did before switching to marijuana, and adherence to other important treatment regimens could be compromised. Again, we leave exploration of these important issues to future research.

Study Results

Our simple bivariate comparisons demonstrated that, with the exception of glaucoma, fewer prescriptions were written for any of our study condition categories when a medical marijuana law was in effect (Exhibit 2). When we controlled for other factors that might have been driving differences in prescribing across states that did and did not have medical marijuana law in effect, we found similar results.

The results for our difference-in-differences models of daily doses filled were extremely consistent across condition categories (Exhibit 3). For seven of the categories—all but glaucoma and spasticity—we found that implementing an effective medical marijuana law led to a reduction of between 265 daily doses (for depression) and 1,826 daily doses (for pain) filled per physician per year. The effects of a medical marijuana law on those seven categories were all significant ($p < 0.01$), with magnitudes that were econom-

EXHIBIT 2

Daily doses filled per physician per year in states with and without a medical marijuana law

Condition category	Annual number of daily doses prescribed per physician in states:		Difference
	Without a medical marijuana law	With a medical marijuana law	
Anxiety	11,220.29	10,113.77	1,106.51***
Depression	9,576.73	8,296.25	1,280.47***
Glaucoma	2,551.40	2,616.04	-64.64***
Nausea	10,067.92	9,040.22	1,027.70***
Pain	31,810.07	28,165.54	3,644.53***
Psychosis	11,421.46	10,298.60	1,122.86***
Seizures	9,398.60	8,028.74	1,369.85***
Sleep disorders	7,557.97	6,942.94	615.03***
Spasticity	2,067.82	1,645.43	422.38***

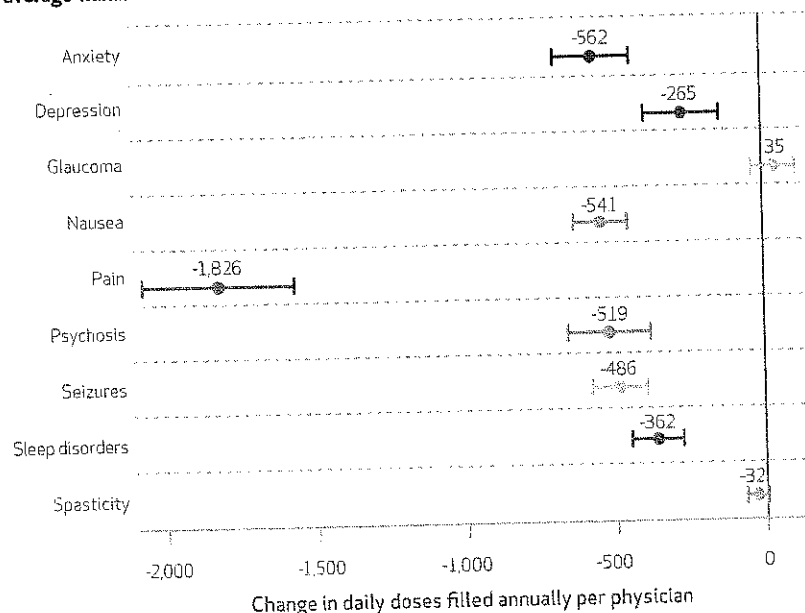
SOURCE Authors' analysis of data for 2010–13 from the disease-specific extracts in the Medicare Part D Prescription Drug Event Standard Analytic File. *** $p < 0.01$

ically important. We found no statistically or economically significant effect on glaucoma or spasticity.

To confirm that these effects were causally related to implementing a medical marijuana law,

EXHIBIT 3

Average numbers of daily doses filled for prescription drugs annually per physician in states with a medical marijuana law, by condition categories studied, compared to the average numbers in states without a law



SOURCE Authors' analysis. **NOTES** To interpret this exhibit, negative numbers indicate that fewer daily doses of the indicated prescription drugs were filled in states with medical marijuana laws than in states without them. Dots represent the estimated effect (regression coefficient) of the implementation of a law, and lines represent the upper and lower bounds of 95% confidence intervals. Data were aggregated to all prescriptions in a disease category by physician.

and not due to some unobserved characteristic of the states that affected general prescribing and adoption of a medical marijuana law, we selected drugs from four classes—blood-thinning agents, phosphorous-stimulating agents, antivirals used to treat influenza, and antibiotics—in which there is no evidence of any beneficial (or harmful) effect from the use of medical marijuana.

We found no changes after implementation of a medical marijuana law in the number of daily doses filled in condition categories with no medical marijuana indication. This provides strong evidence that the observed shifts in prescribing patterns were in fact due to the passage of the medical marijuana laws. Results from these models are presented in the Appendix.¹⁸

Our analysis suggested that prescription drug spending in Medicare Part D—that is, both program and enrollee spending—fell by \$104.5 million in 2010 and that cost savings had risen to \$165.2 million by 2013 (Exhibit 4). The savings accrued from only seventeen states and the District of Columbia—jurisdictions that had implemented a medical marijuana law by 2013. Assuming the remaining states are of similar size, we forecast that if all states were to have adopted a medical marijuana laws by 2013, total spending by Medicare Part D would have been \$468.1 million less in that year than it would have been had no state adopted such a law. That amount would have represented just under 0.5 percent of all Medicare Part D spending in 2013.

Discussion

As of June 2016 twenty-four states and the District of Columbia had passed a medical marijuana law (though not all states had fully implemented their laws by that time), and there is a growing academic literature on the effects of these laws. Researchers have investigated negative externalities associated with medical marijuana, such as spillovers from medical marijuana to recreational use of the drug among adults and youth, and changes in the number of traffic fatalities following the implementation of a medical marijuana law, among other topics.

Remarkably, there is no literature that investigates the extent to which marijuana is used medically as a result of implementing medical marijuana laws at the state level. In this article we provide the first, albeit somewhat indirect, evidence on the clinical impact of medical marijuana availability by examining the impact of medical marijuana laws on the use of all FDA-approved prescription drugs paid for by the Medicare Part D program.

Generally, we found that when a medical marijuana law went into effect, prescribing for FDA-

approved prescription drugs under Medicare Part D fell substantially. The only exceptions were for spasticity- and glaucoma-related drugs. Ultimately, we estimated that nationally the Medicare program and its enrollees spent around \$165.2 million less in 2013 as a result of changed prescribing behaviors induced by seventeen states and the District of Columbia—the jurisdictions that had legalized medical marijuana by then.

Policies surrounding the appropriate use of medical marijuana are the subject of intense and ongoing debate, and the research we have presented here has direct implications for multiple aspects of the evolution of those policies. State reforms to medical marijuana policies are constrained by the current status of marijuana as a Schedule I drug under the Controlled Substances Act. That status prohibits any sale of marijuana under federal law because the drug is defined to have a high potential for abuse and no medical benefit; thus, many state laws now contradict federal law. Our findings and existing clinical literature imply that patients respond to medical marijuana legislation as if there are clinical benefits to the drug, which adds to the growing body of evidence suggesting that the Schedule I status of marijuana is outdated.

Additionally, at a time when Medicare is under increased fiscal pressure, our research suggests that more widespread state approval of medical marijuana could provide modest budgetary relief. Although some of the savings are likely to be a transfer of costs from the Medicare program to

EXHIBIT 4

Estimated annual change in national Medicare spending after implementation of state medical marijuana laws, by year

Year	Estimated change (\$)
2010	–104,513,189
2011	–114,995,271
2012	–130,491,985
2013	–165,193,681
2010–13	–515,194,125

SOURCE Authors' analysis of data for each year from the disease-specific extracts in the Medicare Part D Prescription Drug Event Standard Analytic File. **NOTES** "Medicare spending" consists of spending by the program and beneficiaries' out-of-pocket spending. More information on the cost calculations is available in the online Appendix (see Note 18 in text).

beneficiaries who would have purchased marijuana out of pocket, saving \$468.1 million annually is not trivial. As noted above, that would represent about 0.5 percent of total Part D spending for 2013.

Finally, while we did not directly test the impact on governmental programs other than Medicare—most importantly, Medicaid—finding significant cost savings for Medicare suggests that other programs might also enjoy budgetary reductions when medical marijuana laws are implemented. Lowering the costs of Medicare and other programs is not a sufficient justification for approving marijuana for medical use, a decision that is complex and multidimensional. Nonetheless, these savings should be considered when changes in marijuana policy are discussed. ■

The authors thank seminar participants at the University of North Carolina at Chapel Hill and Texas A&M University for comments on an earlier presentation of this research.

NOTES

- 1 O'Keefe K. State medical marijuana implementation and federal policy. *J Health Care Law Policy*. 2013;16(1):39–58.
- 2 Cerdá M, Wall M, Keyes KM, Galea S, Hasin D. Medical marijuana laws in 50 states: investigating the relationship between state legalization of medical marijuana and marijuana use, abuse, and dependence. *Drug Alcohol Depend*. 2012;120(1–3):22–7.
- 3 Frequently accepted illnesses include chronic pain, nausea, cachexia (weakening or wasting of the body), wasting syndrome resulting from HIV, glaucoma, AIDS, and cancer. For more details on specific state policies, see ProCon.org. 24 legal medical marijuana states and DC: laws, fees, and possession limits [Internet]. Santa Monica (CA): ProCon.org; c 2016 [cited 2016 May 25]. Available from: http://medicalmarijuana.procon.org/view_resource.php?resourceID=000881
- 4 Pacula RL, Hunt P, Boustead A. Words can be deceiving: a review of variation among legally effective medical marijuana laws in the United States. *J Drug Policy Anal*. 2014;7(1):1–19.
- 5 Chu Y-WL. The effects of medical marijuana laws on illegal marijuana use. *J Health Econ*. 2014;38(1):43–61.
- 6 Anderson DM, Hansen B, Rees DI. Medical marijuana laws, traffic fatalities, and alcohol consumption. *J Law Econ*. 2013;56(2):333–69.
- 7 Lynne-Landsman SD, Livingston MD, Wagenaar AC. Effects of state medical marijuana laws on adolescent marijuana use. *Am J Public Health*. 2013;103(8):1500–6.
- 8 Wall MM, Poh E, Cerdá M, Keyes KM, Galea S, Hasin DS. Adolescent marijuana use from 2002 to 2008: higher in states with medical marijuana laws, cause still unclear. *Ann Epidemiol*. 2011;21(9):714–6.
- 9 Harper S, Strumpf EC, Kaufman JS. Do medical marijuana laws increase marijuana use? Replication study and extension. *Ann Epidemiol*. 2012;22(3):207–12.
- 10 Bradford WD, Kleit AN, Neitert PJ, Steyer T, McIlwain T, Ornstein S. How direct-to-consumer television advertising for osteoarthritis drugs affects physicians' prescribing behavior. *Health Aff (Millwood)*. 2006;25(5):1371–7.
- 11 Keith A. Regulating information about aspirin and the prevention of heart attack. *Am Econ Rev*. 1995;85(2):96–9.
- 12 Rubin P. Economics of prescription drug advertising. *Journal of Research in Pharmaceutical Economics*. 1991;3(4):29–39.
- 13 Institute of Medicine. Marijuana and medicine: assessing the science base. Washington (DC): National Academies Press; 1999.
- 14 For the years 2010–12, when the data originated from a request by ProPublica under the Freedom of Information Act of 1966, only physician National Provider Identifier (NPI) numbers appeared in the public use Medicare Part D Prescription Drug Event Standard Analytic File data. We merged information on physician characteristics and practice location and the analysis file according to the NPI number and the National Plan and Provider Enumeration System of the Centers for Medicare and Medicaid Services.
- 15 For more details on state laws with links to legislative language, see Note 3.
- 16 Whiting PF, Wolff RF, Deshpande S, Di Nisio M, Duffy S, Hernandez AV, et al. Cannabinoids for medical use: a systematic review and meta-analysis. *JAMA*. 2015;313(24):2456–73.
- 17 For example, beta-blockers such as metoprolol and propranolol have been used for decades to treat hypertension, cardiac dysrhythmias, and other related diagnoses. Researchers have noted that beta-blockers also control physical sensations associated with anxiety (such as rapid heartbeat, tightness in the chest, and trembling) and that when patients do not feel these sensations, their psychological experience of anxiety is significantly reduced. As a result, these drugs are widely prescribed for situational and other forms of anxiety, even though they are not officially approved for that indication by the FDA. An estimated 52 percent of prescriptions for beta-blockers in the period 1999–2002 were for off-label use. See Lin HW, Phan K, Lin SJ. Trends in off-label beta-blocker use: a secondary data analysis. *Clin Ther*. 2006;28(10):1736–46; discussion 1710–1.
- 18 To access the Appendix, click on the Appendix link in the box to the right of the article online.
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New York State Department of Health Announces Opioid Use to be Added as a Qualifying Condition for Medical Marijuana

Opioid Use Joins 12 other Qualifying Conditions Under the Compassionate Care Act

ALBANY, N.Y. (June 18, 2018) - The New York State Department of Health today announced it will develop a regulatory amendment to add opioid use as a qualifying condition for medical marijuana.

"The opioid epidemic in New York State is an unprecedented crisis, and it is critical to ensure that providers have as many options as possible to treat patients in the most effective way," said New York State Health Commissioner Dr. Howard Zucker. "As research indicates that marijuana can reduce the use of opioids, adding opioid use as a qualifying condition for medical marijuana has the potential to help save countless lives across the state."

Opioid use joins 12 other qualifying conditions under the state's Medical Marijuana Program. Currently, patients can be eligible if they have been diagnosed with one or more of the following severe debilitating or life-threatening conditions: cancer; HIV infection or AIDS; amyotrophic lateral sclerosis (ALS); Parkinson's disease; multiple sclerosis; spinal cord injury with spasticity; epilepsy; inflammatory bowel disease; neuropathy; Huntington's disease; post-traumatic stress disorder; or chronic pain.

In New York State, overdose deaths involving opioids increased by about 180 percent from 2010 (over 1,000 deaths) to 2016 (over 3,000 deaths). While in 2002, it was still relatively rare to have an opioid overdose in most communities, it is now commonplace throughout the state. In addition to the dramatic increase in the number of deaths in the past few years, the opioid epidemic has devastated the lives of those with opioid use disorder, along with their families and friends. Those with opioid use disorder are at higher risk for HIV, Hepatitis C and chronic diseases.

Marijuana can be an effective treatment for pain, greatly reduces the chances of dependence and eliminates the risk of fatal overdose compared to opioid-based medications. Studies of some states with medical marijuana programs have found notable associations of reductions in opioid deaths and opioid prescribing with the availability of cannabis products. States with medical cannabis programs have been found to have lower rates of opioid overdose deaths than other states, perhaps by as much as 25 percent. Studies on opioid prescribing in some states with medical marijuana laws have noted a 5.88 percent lower rate of opioid prescribing. Adding prescribed opioid use as a qualifying condition for medical marijuana will allow individuals who use opioids to instead use medical marijuana for pain relief.

The Department is continuously making improvements to New York State's Medical Marijuana Program in order to better serve patients. Recent enhancements include adopting new regulations to improve the program for patients, practitioners and registered organizations; authorizing five additional registered organizations to manufacture and dispense medical marijuana; adding chronic pain and PTSD as qualifying conditions; permitting home delivery; and empowering nurse practitioners and physician assistants to certify patients.

Senator George Amedore, co-Chair of the Senate Task Force on Heroin and Opioid Addiction said, "I have been strongly advocating to remove barriers and allow the use of medical marijuana as an alternative to opioids because it will help patients, reduce the number of highly addictive opioids in circulation, and ultimately, it will save lives. We continue to be faced with an opioid epidemic that is devastating communities throughout our state. It's important we continue to do everything possible to address this issue from all sides, so I'm glad the

Department of Health is taking this measure that will help high risk patients, as well as those that are struggling with, or have overcome, addiction."

Assembly Health Committee Chair Richard N. Gottfried said, "With the ongoing opioid abuse crisis it is critical that practitioners and patients have access to as many alternatives to opioids as possible. Evidence from across the country shows that access to medical marijuana for pain treatment reduces the use of much more dangerous opioids. Medical marijuana is a safe alternative to opioids, as demonstrated by the many patients currently using it under existing law. I applaud the Health Department's continuing work to strengthen New York's medical marijuana program."

As of June 18, 2018, there are 59,327 certified patients and 1,697 registered practitioners participating in the program.

For more information on New York's Medical Marijuana Program, visit:

https://www.health.ny.gov/regulations/medical_marijuana/.

Study: Medical marijuana could decrease opioid use

Two studies suggest that some people in states with medical marijuana dispensaries avoid using opioids as a way to treat chronic pain

Apr 3, 2018

By EMS1 Staff

WASHINGTON — Two recent studies suggest that medical marijuana may decrease the use of opioids.

NPR reported that in states with medical marijuana dispensaries, some people are avoiding the use of opioids to treat pain and instead turning to cannabis, according to a study by the National Academy of Sciences, Engineering and Medicine published in JAMA Internal Medicine.



In states with medical marijuana dispensaries, some people are avoiding the use of opioids to treat pain and instead turning to cannabis, according to a study by the National Academy of Sciences, Engineering and Medicine published in JAMA Internal Medicine. (Photo/AP)

"We do know that cannabis is much less risky than opiates, as far as likelihood of dependency," University of Georgia professor W. David Bradford, who helped conduct the study, said. "And certainly there's no mortality rate."

Bradford added that "there are substantial reductions in opiate use" in states that have made medical marijuana legal, with a 14 percent decrease in prescriptions based on Medicare data.

Another study conducted by the University of Kentucky College of Public Health also suggested that medical marijuana may slow the opioid epidemic.

Lead author Hefei Wen found that both medical and recreational marijuana "have the potential to reduce opioid prescribing for Medicaid enrollees, a segment of population with disproportionately high risk for chronic pain, opioid use disorder and opioid overdose. Nevertheless, marijuana liberalization alone cannot solve the opioid epidemic."

Bradford said that while medical marijuana could decrease opioid use, "it is not without risks."

"Like any drug in our FDA-approved pharmacopeia, it can be misused," he said. "There's no question about it. So I hope nobody reading our study will say 'Oh, great, the answer to the opiate problem is just put cannabis in everybody's medicine chest and we are good to go.' We are certainly not saying that."

On the other side of the spectrum, Columbia University professor Dr. Mark Olfson conducted a study and found that marijuana users were six times more likely to abuse opioids than non-users.

"A young person starting marijuana is maybe putting him — or herself at increased risk," Olfson said. "On the other hand there may be a role — and there likely is a role — for medical marijuana in reducing the use of prescribed opioids for the management of pain."

Olfson said a study needs to be conducted that follows individuals and determines whether or not marijuana use is a good substitute for opioids, but it's difficult to conduct such a study because of the restrictions the federal government puts on marijuana research.

"That does make this a difficult area to study, and that's unfortunate because we have a large problem with the opioid epidemic," Olfson says. "And at the same time, with an aging population, we have lots of people who have pain conditions and who will benefit from appropriate management."

Medical marijuana study by Ed Praetorian on Scribd

Association Between US State Medical Cannabis Laws and Opioid Prescribing in the Medicare Part D Population

Ashley C. Bradford, BA; W. David Bradford, PhD; Amanda Abraham, PhD; Grace Bagwell Adams, PhD

IMPORTANCE Opioid-related mortality increased by 15.6% from 2014 to 2015 and increased almost 320% between 2000 and 2015. Recent research finds that the use of all pain medications (opioid and nonopioid collectively) decreases in Medicare Part D and Medicaid populations when states approve medical cannabis laws (MCLs). The association between MCLs and opioid prescriptions is not well understood.

OBJECTIVE To examine the association between prescribing patterns for opioids in Medicare Part D and the implementation of state MCLs.

DESIGN, SETTING, AND PARTICIPANTS Longitudinal analysis of the daily doses of opioids filled in Medicare Part D for all opioids as a group and for categories of opioids by state and state-level MCLs from 2010 through 2015. Separate models were estimated first for whether the state had implemented any MCL and second for whether a state had implemented either a dispensary-based or a home cultivation only-based MCL.

MAIN RESULTS AND MEASURES The primary outcome measure was the total number of daily opioid doses prescribed (in millions) in each US state for all opioids. The secondary analysis examined the association between MCLs separately by opioid class.

RESULTS From 2010 to 2015 there were 23.08 million daily doses of any opioid dispensed per year in the average state under Medicare Part D. Multiple regression analysis results found that patients filled fewer daily doses of any opioid in states with an MCL. The associations between MCLs and any opioid prescribing were statistically significant when we took the type of MCL into account: states with active dispensaries saw 3.742 million fewer daily doses filled (95% CI, -6.289 to -1.194); states with home cultivation only MCLs saw 1.792 million fewer

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Association of Medical and Adult-Use Marijuana Laws With Opioid Prescribing for Medicaid Enrollees

Hefei Wen, PhD; Jason M. Hockenberry, PhD

IMPORTANCE Overprescribing of opioids is considered a major driving force behind the opioid epidemic in the United States. Marijuana is one of the potential nonopioid alternatives that can relieve pain at a relatively lower risk of addiction and virtually no risk of overdose. Marijuana liberalization, including medical and adult-use marijuana laws, has made marijuana available to more Americans.

OBJECTIVE To examine the association of state implementation of medical and adult-use marijuana laws with opioid prescribing rates and spending among Medicaid enrollees.

DESIGN, SETTING, AND PARTICIPANTS This cross-sectional study used a quasi-experimental difference-in-differences design comparing opioid prescribing trends between states that started to implement medical and adult-use marijuana laws between 2011 and 2016 and the remaining states. This population-based study across the United States included all Medicaid fee-for-service and managed care enrollees, a high-risk population for chronic pain, opioid use disorder, and opioid overdose.

EXPOSURES State implementation of medical and adult-use marijuana laws from 2011 to 2016.

MAIN RESULTS AND MEASURES Opioid prescribing rate, measured as the number of opioid prescriptions covered by Medicaid on a quarterly, per-1000-Medicaid-enrollee basis.

RESULTS State implementation of medical marijuana laws was associated with a 5.88% lower rate of opioid prescribing (95% CI, -11.55% to approximately -0.21%). Moreover, the implementation of adult-use marijuana laws, which all occurred in states with existing

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Medical marijuana could reduce opioid use in older adults

Study shows up to 65 percent of older adults who use medical marijuana significantly reduced their chronic pain and dependence on opioid painkillers

Date: May 1, 2018

Source: Northwell Health

Summary: A study shows up to 65 percent of older adults who use medical marijuana significantly reduced their chronic pain and dependence on opioid painkillers.

FULL STORY

A questionnaire of older men and women suffering from chronic pain who were given medical marijuana found that the drug significantly reduced pain and their need for opioid painkillers, Northwell Health researchers report.

The results of the study, "Older Adults' Use of Medical Marijuana for Chronic Pain: A Multisite Community-Based Survey," are scheduled to be presented May 3, 2018 at the annual meeting of the American Geriatrics Society in Orlando, FL.

To gauge how effective medical marijuana was at managing chronic pain and reducing opioid use, researchers surveyed 138 medical marijuana users with an anonymous 20-question survey focusing on how often they used the marijuana, in what form they took it, how much it reduced pain and whether or not they were able to cut back their use of other painkillers.

When patients were asked if they were able to curb their use of other painkillers after starting medical marijuana, 18 percent reported decreasing their use "moderately," 20 percent "extremely" and 27 percent "completely." An overwhelming number of subjects (91 percent) would recommend medical marijuana to others.

Comments from patients tell the tale:

"My quality of life has increased considerably since starting medical marijuana," one patient said. "I was on opiates for 15 years, and 6 months on marijuana, and off both completely."

Another patient said: "It [medical marijuana] is extremely effective and has allowed me to function in my work and life again. It has not completely taken away the pain, but allows me to manage it."

"I was on Percocet and replaced it with medical marijuana. Thank you, thank you, thank you," said another.

These patients had been living with chronic pain from osteoarthritis, spinal stenosis, hips and knees that could not be replaced, and pain not relieved by steroid injections, said Diana Martins-Welch, MD, a co-author of the study and physician in the Division of Geriatric and Palliative Medicine, Department of Medicine at Northwell Health.

Based on these results, she believes that medical marijuana could be effective in curbing the opioid epidemic now ravaging the United States. "What I'm seeing in my practice, and what I'm hearing from other providers who are participating in medical marijuana programs, is that their patients are using less opioids," said Martins-Welch. "I've

even gotten some patients completely off opioids."

As effective as medical marijuana can be, it's not widely available or prescribed, Martins-Welch said. Plus, people have to jump through many hoops just to get certified to receive it, she said.

Martins-Welch believes medical marijuana should be more widely available and easier to get. Medical marijuana is legal in only 30 states, she said. In addition, because marijuana is federally illegal, it's expensive and not covered by insurance, putting it beyond the reach of many patients who could benefit from it, she said.

Medical marijuana can cost on average \$300 for a one-month supply, Martins-Welch said. "And it's a cash-only business."

"Even the process you have to go through to get certified is expensive," she said.

Martins-Welch and colleagues surveyed men and women between the ages 61 to 70 about their use of medical marijuana. Patients responded to 20 questions about their marijuana use. The researchers found that most patients, 45 percent, used vaporized oil, while 28 percent used pills and 17 percent used marijuana-laced oil. Twenty-one percent used marijuana once a day, 23 percent used it twice daily, and 39 percent used marijuana more than twice a day.

Using marijuana in these forms dramatically reduces its mind-altering effect, Martins-Welch said.

In most cases, a doctor recommended medical marijuana (46 percent) followed by a family member or friend (24 percent) or another health care provider (6 percent), while others did not specify who recommended it (24 percent).

When asked how pain levels changed before and one month after starting marijuana, most patients reported that average pain scores dropped from 9.0 on a scale of 0-10 to a more moderate pain threshold of 5.6.

However, older patients reported a reduction in the use of other painkillers less often than younger patients (64 percent versus 93 percent), the researchers found. Older patients also recommended medical marijuana less often than younger ones (86 percent versus 100 percent respectively).

When patients were quizzed about whether side effects of medications impacted their daily activities, the average score went from 6.9 before starting medical marijuana to 3.5 a month after using the drug.

Story Source:

Materials provided by **Northwell Health**. *Note: Content may be edited for style and length.*

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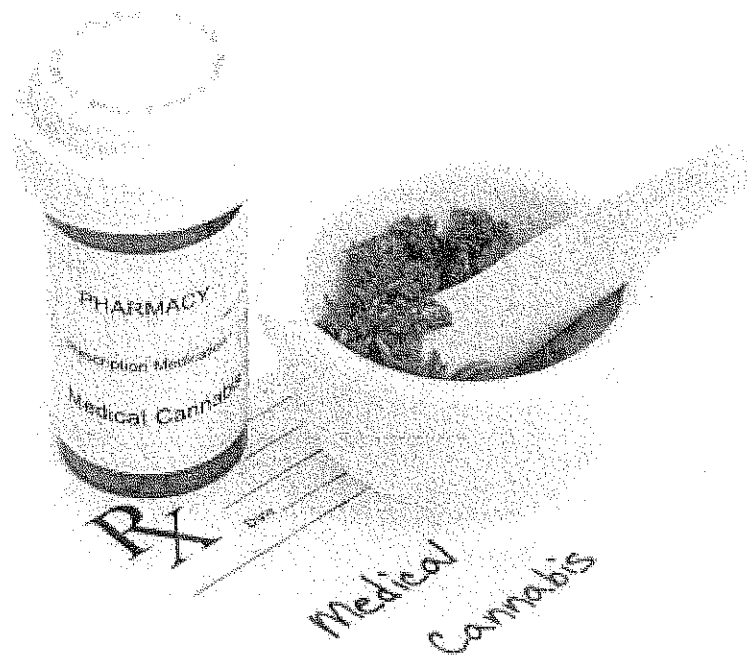
Date: April 2, 2018

Source: University of Georgia, School of Public and International Affairs

Summary: U.S. states that have approved medical cannabis laws saw a dramatic reduction in opioid use, according to a new study.

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FULL STORY



Medical cannabis concept (stock image).

Credit: © Sherry Young / Fotolia

States that have approved medical cannabis laws saw a dramatic reduction in opioid use, according to a new study by researchers at the University of Georgia.

In a paper published today in the *Journal of the American Medical Association, Internal Medicine*, researchers examined the number of all opioid prescriptions filled between 2010 and 2015 under Medicare Part D, the prescription drug benefit plan available to Medicare enrollees.

In states with medical cannabis dispensaries, the researchers observed a 14.4 percent reduction in use of prescription opioids and nearly a 7 percent reduction in opiate prescriptions filled in states with home-cultivation-only medical cannabis laws.

"Some of the states we analyzed had medical cannabis laws throughout the five-year study period, some never had medical cannabis, and some enacted medical cannabis laws during those five years," said W. David Bradford, study co-author and Busbee Chair in Public Policy in the UGA School of Public and International Affairs. "So, what we were able to do is ask what happens to physician behavior in terms of their opiate prescribing if and when medical cannabis becomes available."

Since California approved the first medical cannabis law in 1996, 29 states and the District of Columbia have approved some form of medical cannabis law.

"Physicians cannot prescribe cannabis; it is still a Schedule I drug," Bradford said. "We're not observing that prescriptions for cannabis go up and prescriptions for opioids go down. We're just observing what changes when medical cannabis laws are enacted, and we see big reductions in opiate use."

The researchers examined all common prescriptions opiates, including hydrocodone, oxycodone, morphine, methadone and fentanyl. Because heroin is not a legal drug, it was not included as part of the study.

Last year, the U.S. Department of Health and Human Services declared a public health emergency related to the abuse of opiates. Opioid overdoses accounted for more than 42,000 deaths in 2016, more than any previous year on record, and more than 40 percent of opioid overdose deaths involved a prescription opioid, according to HHS.

Opioid prescription rates increased from about 148 million prescriptions in 2005 to 206 million prescriptions by 2011, Bradford said. This coincided with an increase in the number of opioid-related deaths.

"There is a growing body of literature that suggests cannabis may be used to manage pain in some patients, and this could be a major component of the reductions we see in the use of opiates," he said.

The researchers did not, however, see any significant reductions in the number of non-opioid drugs prescribed during the study period.

"In other studies, we examined prescription rates for non-opioid drugs such as blood thinners, flu medications and phosphorus stimulants, and we saw no change," said Ashley Bradford, lead author of the study and graduate student in UGA's department of public administration and policy. "Medical cannabis wouldn't be an effective treatment for flu or for anemia, so we feel pretty confident that the changes we see in opioids are because of cannabis because there is a legitimate medical use."

The researches concede that if medical cannabis is to become an effective treatment, there is still much work to be done. Scientists are only just beginning to understand the effects of the compounds contained in cannabis, and an effective "dose" of cannabis would need to be defined clearly so that each patient receives a consistent dose.

"Regardless, our findings suggest quite clearly that medical cannabis could be one useful tool in the policy arsenal that can be used to diminish the harm of prescription opioids, and that's worthy of serious consideration," David Bradford said.

Coauthors on the paper Amanda Abraham, assistant professor of public administration and policy at UGA and Grace Bagwell Adams, assistant professor of health policy and management in UGA's College of Public Health.

Story Source:

Medical Use of Marihuana

Effective date: 7/12/18

Pursuant to the authority vested in the Commissioner of Health by section 3369-a of the Public Health Law (PHL), Section 1004.2 of Title 10 (Health) of the Official Compilation of Codes, Rules and Regulations of the State of New York is hereby amended, to be effective upon filing with the Secretary of State, to read as follows:

Section 1004.2 Practitioner issuance of certification.

(a) Requirements for Patient Certification. A practitioner who is registered pursuant to 1004.1 of this part may issue a certification for the use of an approved medical marihuana product by a qualifying patient. Such certification shall contain:

* * *

(8) the patient's diagnosis, limited solely to the specific severe debilitating or life-threatening condition(s) listed below;

* * *

(xi) any severe debilitating pain that the practitioner determines degrades health and functional capability; where the patient has contraindications, has experienced intolerable side effects, or has experienced failure of one or more previously tried therapeutic options; and where there is documented medical evidence of such pain having lasted three months or more beyond onset, or the practitioner reasonably anticipates such pain to last three months or more beyond onset; [or]

(xii) post-traumatic stress disorder;

(xiii) any condition for which an opioid could be prescribed, provided that the precise underlying condition is expressly stated on the patient's certification; or

([xii]xiv) any other condition added by the commissioner.

(9) The condition or symptom that is clinically associated with, or is a complication of the severe debilitating or life-threatening condition listed in paragraph (8) of this subdivision. Clinically associated conditions, symptoms or complications, as defined in subdivision seven of section thirty-three hundred sixty of the public health law are limited solely to:

(i) Cachexia or wasting syndrome;

(ii) severe or chronic pain resulting in substantial limitation of function;

(iii) severe nausea;

(iv) seizures;

(v) severe or persistent muscle spasms; [or]

(vi) post-traumatic stress disorder;

(vii) opioid use disorder, but only if enrolled in a treatment program certified pursuant to Article 32 of the Mental Hygiene Law; or

([vi]viii) such other conditions, symptoms or complications as added by the commissioner.

Regulatory Impact Statement

Statutory Authority:

The Commissioner of Health is authorized pursuant to Section 3369-a of the Public Health Law (PHL) to promulgate rules and regulations necessary to effectuate the provisions of Title V-A of Article 33 of the PHL. The Commissioner of Health is also authorized pursuant to Section 3360(7) of the PHL to add serious conditions under which patients may qualify for the use of medical marihuana.

Legislative Objectives:

The legislative objective of Title V-A is to comprehensively regulate the manufacture, sale and use of medical marihuana, by striking a balance between potentially relieving the pain and suffering of those individuals with serious conditions, as defined in Section 3360(7) of the Public Health Law, and protecting the public against risks to its health and safety.

Needs and Benefits:

The regulatory amendments are necessary to allow registered practitioners to issue certifications for the medical use of marihuana as an alternative to prescription opioids. This regulatory amendment will particularly benefit patients with conditions for which opioids could otherwise be prescribed, as medical marihuana will now be an available alternative to opioids. Permitting the medical use of marihuana as an alternative to opioids will offer an additional treatment option for registered practitioners. In addition, adding opioid use disorder as a clinically associated condition will allow individuals who are addicted to opioids to instead use medical marihuana. Requiring practitioners to expressly state the precise underlying condition will help the

Department to better understand how medical marihuana can be used as an alternative to prescription opioids.

The amendments are also necessary to conform the regulations to recent amendments to Section 3360(7) of the PHL that added post-traumatic stress disorder as a serious condition.

Costs:

Costs to the Regulated Entity:

Patients certified by their practitioner for the medical use of marihuana will have to pay a \$50 non-refundable application fee to obtain a registry identification card to register with the Medical Marihuana Program. However, the Department may waive or reduce this fee in cases of financial hardship. Patients will also have a cost associated with the fees charged by registered organizations for the purchase of medical marihuana products.

Costs to Local Government:

This amendment to the regulation does not require local governments to perform any additional tasks; therefore, it is not anticipated to have an adverse fiscal impact.

Costs to the Department of Health:

With the inclusion of these new serious conditions, additional patient registrations will need to be processed by the Department. In addition, there may be an increase in the number of practitioners who register with the program to certify patients who may benefit from the use of medical marihuana for these new serious conditions. This regulatory amendment may result in an increased cost to the Department for additional staffing to provide registration support for patients and practitioners as well as certification support for registered practitioners. However,

any resulting cost of additional staffing is greatly outweighed by the benefit of making another treatment option available to practitioners who are treating patients suffering from severe pain or opioid use disorder.

Local Government Mandates:

This amendment does not impose any new programs, services, duties or responsibilities on local government.

Paperwork:

Registered practitioners who certify patients for the program will be required to maintain a copy of the patient's certification in the patient's medical record.

Duplication:

No relevant rules or legal requirements of the Federal and State governments duplicate, overlap or conflict with this rule.

Alternatives:

An alternative would be to not allow medical marihuana as a treatment for opioid use disorder or conditions for which an opioid could be prescribed. However, medical marihuana has been shown to be an effective treatment for pain, to reduce the chance of opioid dependence, and there is no risk of fatal overdose compared to opioid-based medications.

Federal Standards:

Federal requirements do not include provisions for a medical marihuana program.

Compliance Schedule:

There is no compliance schedule imposed by these amendments, which shall be effective upon filing with the Secretary of State.

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Regulatory Flexibility Analysis for Small Businesses and Local Governments

No regulatory flexibility analysis is required pursuant to section 202-b(3)(a) of the State Administrative Procedure Act. The amendment does not impose an adverse economic impact on small businesses or local governments, and it does not impose reporting, record keeping or other compliance requirements on small businesses or local governments.

Cure Period:

Chapter 524 of the Laws of 2011 requires agencies to include a “cure period” or other opportunity for ameliorative action to prevent the imposition of penalties on the party or parties subject to enforcement under the regulation. The regulatory amendment authorizing the addition of this serious condition does not mandate that a practitioner register with the program. This amendment does not mandate that a registered practitioner issue a certification to a patient who qualifies for this new serious condition. Hence, no cure period is necessary.

Statement in Lieu of Rural Area Flexibility Analysis

A Rural Area Flexibility Analysis for these amendments is not being submitted because amendments will not impose any adverse impact or significant reporting, record keeping or other compliance requirements on public or private entities in rural areas. There are no other compliance costs imposed on public or private entities in rural areas as a result of the amendments.

Statement in Lieu of Job Impact Statement

No job impact statement is required pursuant to section 201-a(2)(a) of the State Administrative Procedure Act. It is apparent, from the nature of the amendment, that it will not have an adverse impact on jobs and employment opportunities.

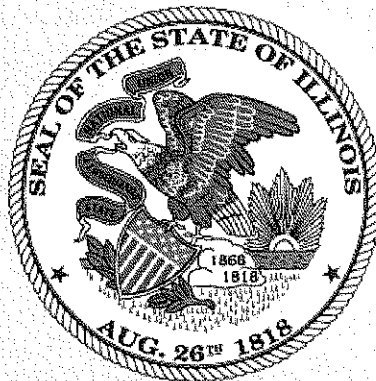
Emergency Justification

In New York State, the number of overdose deaths involving opioids has increased from over 1,000 deaths in 2010, to over 3,000 deaths in 2016. The opioid epidemic is an unprecedented crisis and practitioners should have as many treatment options available to them as possible.

Medical marihuana has been demonstrated to be an effective treatment option for pain, thereby reducing the chance of dependence and the risk of fatal overdose as compared to opioid-based medications. Studies of some states with medical marihuana programs have found notable associations of reductions in opioid deaths and opioid prescribing with the availability of cannabis products. States with medical marihuana programs have also been found to have less opioid overdose deaths than other states by as much as 25 percent. Studies of opioid prescribing in some states with medical marihuana programs have noted a 5.88 percent lower rate of opioid prescribing.

The regulations are necessary to immediately allow registered practitioners the option of certifying patients to use medical marihuana instead of prescribing opioids. In doing so, the regulations will help prevent patients from relying on prescription opioids for severe pain that is not expected to last more than three months. In addition, adding opioid use disorder as a clinically associated condition will allow individuals who are addicted to opioids, but who don't suffer from severe or chronic pain, to instead use medical marihuana. The amendments are also necessary to conform the regulations to recent amendments to Section 3360(7) of the PHL that added post-traumatic stress disorder as a serious condition.

State of Illinois Opioid Action Plan



September 2017

Bruce Rauner, Governor

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Executive Summary

The United States is in the middle of the deadliest drug crisis in our history. In Illinois and across the country, opioids are claiming more and more lives by the day. Fueled by the growing opioid epidemic, drug overdoses have now become the leading cause of death nationwide for people under the age of 50. **In Illinois, opioid overdoses have killed nearly 11,000 people since 2008.** Just last year, nearly 1,900 people died of overdoses—almost twice the number of fatal car accidents. Beyond these deaths are thousands of emergency department visits, hospital stays, as well as the pain suffered by individuals, families, and communities. The opioid epidemic is the most significant public health and public safety crisis facing Illinois.

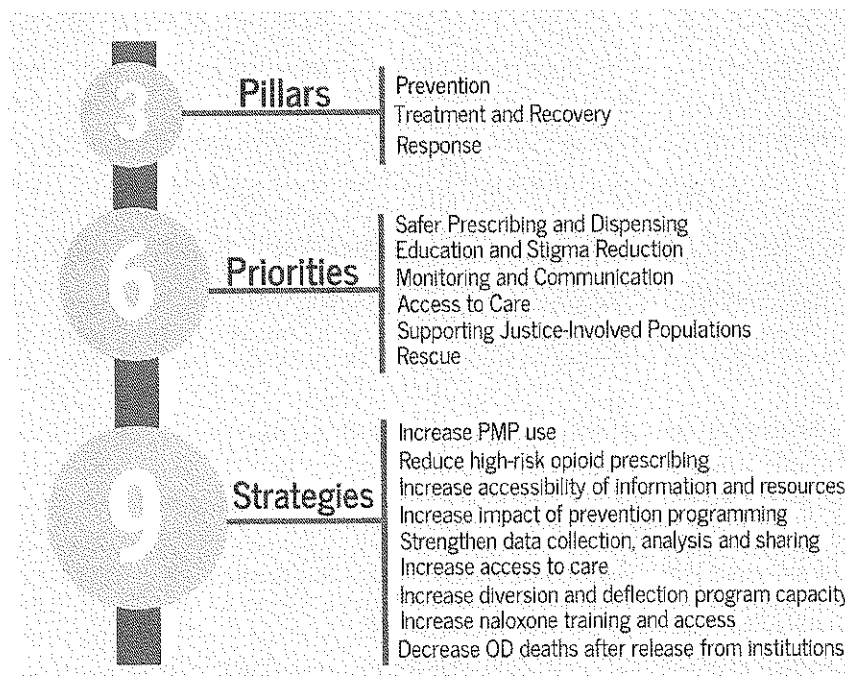
The Illinois Opioid Action Plan presents the State of Illinois' collective call to action. The opioid crisis affects everyone in the state in some way. Its victims are of all ages, races, and walks of life. The causes of the epidemic are complex, and state government must work with everyone—health care providers, local agencies, law enforcement, community groups, individual citizens, and national partners—toward a solution.

The focus of our efforts is to save lives. At the current rate, the opioid epidemic will claim the lives of more than 2,700 Illinoisans in 2020. We must take action to halt this explosive growth. Our goal is to reduce the number of projected deaths in 2020 by a third.

Overall Goal: Reduce Opioid Deaths by 33% in Three Years

This Plan focuses on efforts falling into **three pillars, six main priorities, and nine evidence-based strategies.** The pillars are:

- (1) **Prevention:** preventing the further spread of the opioid crisis
- (2) **Treatment and Recovery:** providing evidence-based treatment and recovery services to Illinois residents with opioid use disorder (OUD), and
- (3) **Response:** averting overdose deaths.



Unfortunately, the crisis will get worse before it gets better. Dangerous synthetic opioids, such as fentanyl, are responsible for an increasing number of deaths. These substances can be thousands of times more poisonous than heroin, adding fuel to the fire.

A great deal of work to combat the epidemic is already underway and many stakeholders across the state have established strong policies and programs. Although we face an uphill climb, Illinois has been moving in the right direction.

Steps in the Right Direction

Opioid STR Grant (2017)

Provides federal dollars to fund a variety of education, treatment, and prevention programs addressing opioids statewide

Heroin Crisis Act (2015)

Increases access to naloxone, strengthens the IL PMP, and provides greater access to medication-assisted treatment for opioid use disorder

Emergency Medical Services Access Law (2012)

IL's "Good Samaritan" law which allows individuals to seek help for overdoses without risking criminal liability for possession

Drug Overdose Prevention Law (2010)

Empowers family and friends to administer the overdose reversal drug naloxone to prevent a fatal opioid overdose

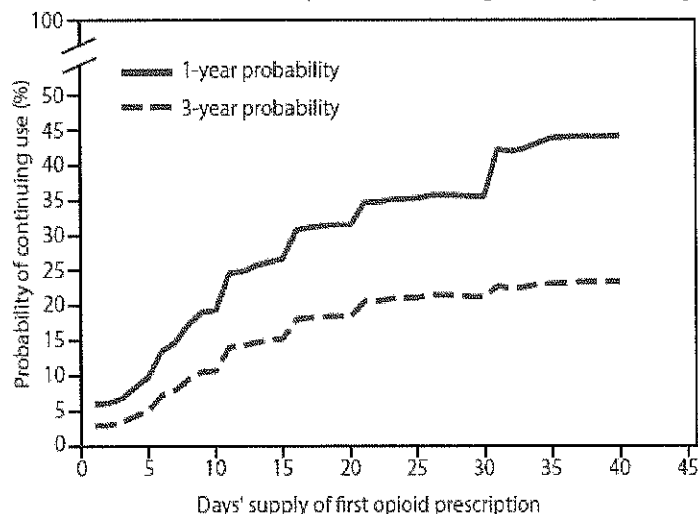
This document is among the first steps in moving toward our goal. It is the strategic framework for the work ahead of us and outlines *what* we need to do to address the crisis and *why* we need to do it. The next steps will involve building the "how"—the specific tactics needed to implement our strategies and achieve our goal. That more detailed implementation plan, which will be developed over the next several months, will require active collaboration among all levels of government, health care providers, community organizations, interested citizens, and other stakeholders.

The opioid epidemic is a crisis we must overcome. Although we have much work ahead of us, convening all the stakeholders to provide a comprehensive strategy is the first step in our path forward. Opioid use disorder is a treatable disease and recovery is within reach. With the combined and united efforts of all Illinoisans, we can and will achieve our goal.

This Action Plan is only the *first* step toward achieving our goal. It is intended to be a strategic document that focuses on what the State of Illinois ought to do and why we ought to do it. The next steps will require collaborating and coordinating with various stakeholders to develop an evidence-based implementation plan. This forthcoming “tactical” plan will identify the specific activities that need to be put in place at both state and local levels to bring each strategy to fruition. Stakeholder input and involvement in the implementation plan will be essential to ensuring that we achieve our goal. Although the opioid epidemic in Illinois affects individuals of all races, ages, and walks of life, its effects have been disproportionately felt by minority populations, particularly by African American and Hispanic communities. Thus, in developing the implementation plan, it will be essential to involve and engage stakeholders representing these minority communities.

UNDERSTANDING THE EPIDEMIC

Opioids are a class of drugs that includes heroin as well as prescription pain relievers such as oxycodone, hydrocodone, morphine, and fentanyl—medications more commonly known as Vicodin®, Percocet®, Oxycontin®, or Actiq®.¹ Prescription opioids are important pain medications that can provide relief for acute or chronic pain. These drugs work by binding to the body’s opioid receptors in the reward



center of the brain, diminishing pain as well as producing feelings of relaxation and euphoria.²

Opioids are addictive. Taking opioids at high doses for extended periods of time increases the risk of developing OUD (colloquially referred to as “addiction”), a chronic disease that can develop with repeated opioid use. Characteristics of OUD include developing physical tolerance (*i.e.*, a need for increasingly higher doses accompanied by a marked decrease in effect), being unable to consistently stop using opioids, and experiencing painful physical withdrawal

symptoms when abruptly stopping use. **Physical tolerance to opioids can begin to develop as early as two to three days following the continuous use of opioids**, which is a large factor that contributes to their addictive potential. For first-time users of prescription opioids, the probability of using opioids long-term is directly correlated to the length of their first prescription (see figure above), and with a 10-day initial supply of prescription opioids, one patient in five will become a long-term user.³

Like other chronic diseases, OUD is cyclical, with people experiencing periods of remission and relapse.⁴ Years of data show that treatment works and recovery from OUD is possible. But without treatment, OUD can have devastating effects on people’s lives—those with an OUD are at a greater risk of dropping out of school, losing their jobs, becoming homeless, losing custody of their children, and/or getting arrested.^{5,6} The Centers for Disease Control and Prevention (CDC) estimates that for every unintentional opioid overdose death, there are 161 individuals who report drug misuse or dependence.⁷ Applying this to Illinois, we estimate that there may be more than 300,000 people in Illinois who misuse or are dependent on opioids.

Opioids are deadly. Because opioids affect respiratory regulation in the brain, high doses can cause people to stop breathing and die. Combining opioids with other substances, particularly benzodiazepines

Addressing Illinois' Opioid Epidemic: A Statewide Strategic Action Plan

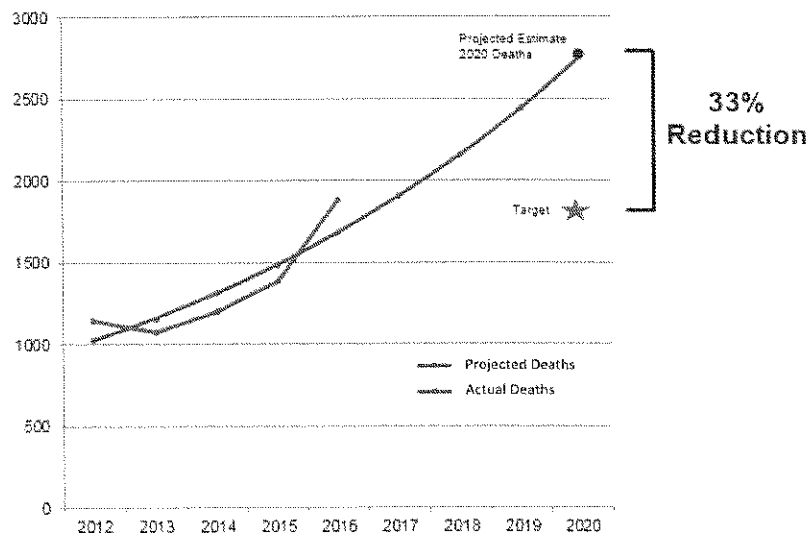
Illinois is in the midst of an unprecedented opioid epidemic. Across the state, opioid overdoses have tragically taken the lives of thousands of our residents. Opioid misuse continues unabated, destroying families and futures. In 2016, opioid overdoses killed 1,889 people in Illinois—more than one and a half times the number of homicides and nearly twice the number of fatal motor vehicle accidents. Since 2013, the number of heroin deaths has nearly doubled, the number of opioid analgesic deaths has almost quadrupled, and the number of synthetic opioid deaths has increased more than tenfold. The death toll continues to rise exponentially, and if the current rate of increase continues unchecked, opioid overdoses will kill more than 2,700 people in 2020 (see figure below). In short, the opioid epidemic is the most significant public health and public safety crisis facing Illinois. It is also a human crisis—even a single death is one death too many, and we must take action to turn the tide.

A coalition of state agencies met in early 2017 to develop a statewide approach to the epidemic. This group recognized that any response should be comprehensive, cross-disciplinary, and concerted. After extensive discussion and analysis, the State set an **overall goal of reducing opioid-related deaths by 33% in three years**. Through policy development, targeted interventions, health promotion, and stigma reduction, this ambitious goal can and must be realized to protect the health and lives of Illinois residents.

To achieve this goal, there is an urgent need for a statewide action plan that brings together systems and stakeholders to prevent the further spread of the opioid crisis and address the needs of those who are currently suffering from opioid use disorder (OUD). The key priorities and strategies of this Action Plan, which are further detailed in the next section, will be rooted in the three pillars of:

- **Prevention:** preventing the further spread of the opioid crisis,
- **Treatment and Recovery:** providing evidence-based treatment and recovery services to Illinois residents with OUD, and
- **Response:** averting overdose deaths.

Unfortunately, the crisis will get worse before it gets better. Dangerous synthetic opioids—such as fentanyl, carfentanil, and even more toxic formulations—are responsible for an increasing number of deaths. These substances can be hundreds to thousands of times more poisonous than heroin and are driving the growth of the epidemic.



(e.g., Valium® and Xanax®) greatly increases the risk of fatal overdose.⁸ Overall, drug overdose deaths have significantly increased in Illinois, and the majority of this increase is attributable to opioids. Nationally, the number of deaths involving opioids, including prescription opioids and heroin, has quadrupled since 1999.⁹

What is causing the opioid epidemic? The increase in OUD and opioid overdose deaths is largely due to the dramatic rise in the rate and amount of opioids prescribed for pain over the past decades.¹⁰ Since 1999, the amount of prescription opioids sold in the U.S. has nearly quadrupled.¹¹ This increase has been attributed to regulatory pressures and pharmaceutical company campaigns that minimized the risks of opioid misuse and encouraged health care providers to prescribe more opioids to treat their patients' pain.^{12,13}

Synthetic Opioids and the "Third Wave" of the Opioid Epidemic

The U.S. is now entering the "third wave" of the opioid epidemic and the largest increases in overdose deaths in recent years have been attributable to synthetic opioids such as fentanyl. According to the CDC, the death rate from synthetic opioids nationwide increased 72.2% from 2014 to 2015. In Illinois, that percentage increase was 120%.

Fentanyl is a powerful synthetic opioid usually used for surgical anesthesia as well as to manage post-operative and severe chronic pain. It is similar to morphine, but 80 times more potent. Fentanyl is also fast acting, meaning that overdoses can occur in seconds to minutes (rather than the longer periods associated with heroin and other opioid overdoses). Overdoses with fentanyl and other synthetics can be more difficult to reverse than with other types of opioids and often require multiple doses of the opioid reversal medication naloxone to treat. Heroin and/or cocaine sold on the street is frequently mixed with illicitly manufactured fentanyl to increase the drug's effects, which can be a lethal combination. Because of its potency and quick onset of action, an individual who is unaware that the drugs they've been sold have been mixed with fentanyl can easily overdose and die on what they mistakenly believe is a "regular" dose of heroin. Even more recently, carfentanil, a fentanyl analogue 100 times more potent than fentanyl and 10,000 times more potent than morphine, has been increasingly making its way into street drugs over the past year and has been implicated in a number of overdose deaths in Illinois and nationwide.

As we move forward with our overall goal of reducing opioid overdose deaths, we will need to take the increasing impact of synthetic opioids into account and be responsive to future shifts and trends that emerge from the epidemic.

In response, providers began prescribing opioids at greater rates and doses: in 2013, providers wrote nearly a quarter billion prescriptions for opioids—enough for every adult in the U.S. to have their own bottle of pills.¹⁴

The risks of OUD, overdose, and death all increase with high-risk opioid prescribing.^{15,16} In 2015, an estimated 12.5 million people in the U.S. used prescription opioids for non-medical use.¹⁷ Many people who use heroin often begin with prescription opioids but later switch to heroin, frequently because heroin is cheaper and more readily available. In fact, people who misuse prescription opioids are 40 times more likely to become addicted to heroin, and 80% of heroin users report prior misuse of prescription opioids.^{18,19,20} With powerful and dangerous synthetic opioids such as fentanyl and carfentanil increasingly making their way into street heroin and other drugs (see inset), the risks of opioid misuse have never been higher.

Although it would seem that an easy solution to the epidemic would be to reduce the availability of prescription opioids, these medications are often necessary for patients who suffer from acute and chronic pain. In the absence of alternative treatments, reducing the supply of prescription opioids too abruptly may drive more people to switch to using illicit drugs (including heroin), thus increasing the risk of overdose. At the other end of the issue, we know that providing evidence-based treatment to people with OUD, such as medications like methadone or buprenorphine in combination with counseling and recovery support services, reduces opioid overdose and risk of

relapse.^{21,22,23} However, treatment capacity in Illinois is not adequate to serve all those in need.

FINDING SOLUTIONS TO THE EPIDEMIC: ILLINOIS' RESPONSE

Illinois has been actively addressing the opioid epidemic through legislation and state agency initiatives since 2010, including the following:

- During the 2016 State of the State address, Governor Rauner announced a **Health and Human Services Transformation** that focuses on behavioral health (mental health and substance use), specifically the integration of behavioral and physical health service delivery. Transformation efforts emphasize (1) prevention and public health, (2) making evidence-based decisions, and (3) moving individuals from institutions to community care to keep them more closely connected with their families and communities.
- The **Medicaid 1115 Demonstration Waiver** proposes enhancements to Illinois' current system of care that will build on transformation efforts, creating a truly integrated physical and behavioral health system that is centered on individuals with behavioral health disorders, their families, and their communities. Proposed pilot projects to improve care available to people with OUD include a medication-assisted treatment (MAT) program for individuals prior to their release from the Illinois Department of Corrections (IDOC); restructuring intake, pre-discharge, and discharge processes in Illinois correctional facilities to ensure that all eligible individuals are enrolled in Medicaid upon release; facilitating linkages to care; and a recovery coaching pilot for individuals with an OUD who have begun the recovery process.
- The Illinois Department of Public Health's (IDPH) most recent **State Health Improvement Plan** (SHIP) was released in 2016 in collaboration with a team of public, private, and voluntary sector stakeholders statewide. Based on stakeholder input, the SHIP identified behavioral health as one of the three most important public health priorities for the state. The SHIP behavioral health priority includes goals to reduce opioid-related deaths and improve opioid-related data collection, utilization, and sharing. A multi-sector group of stakeholders has been appointed to the implementation council and SHIP implementation is currently underway.
- The **Drug Overdose Prevention Law** (PA-096-0361), enacted in 2010, made it legal in Illinois for non-medical persons to administer the opioid overdose reversal medication naloxone to another individual to prevent a fatal opioid overdose. It also allowed the Illinois Department of Human Services/Division of Alcoholism and Substance Abuse (IDHS/DASA) to create its Drug Overdose Prevention Program (DOPP), which establishes and authorizes community naloxone distribution programs statewide.
- The **Emergency Medical Services Access Law** (PA-97-0678), sometimes referred to as Illinois' "Good Samaritan Law," was enacted in 2012 and ensures that individuals experiencing an overdose or seeking emergency medical assistance for someone experiencing an overdose are not charged or prosecuted for felony possession (within specific limitations).
- The **Heroin Crisis Act** (PA-99-0480) was adopted in 2015, amending nearly 25 existing state laws to facilitate coordinated activity to strengthen statewide capacity for the prevention and management of opioid overdoses. Among other things, the Heroin Crisis Act expands access to naloxone statewide; supports education and training initiatives for law enforcement, schools, emergency responders, and others regarding naloxone; strengthens the Illinois Prescription Monitoring Program (ILPMP); and provides greater access to all U.S. Food and Drug Administration (FDA)-approved medication-assisted treatment (MAT) for Medicaid-eligible patients in Illinois.

- Federal dollars awarded to the Illinois Department of Human Services/Division of Alcoholism and Substance Abuse (IDHS/DASA) for **Illinois' State Targeted Response to the Opioid Crisis Grant** (Opioid STR) have been earmarked to fund prevention, treatment, and recovery programs across the state.

We recognize that many regional and local coalitions have been working together to combat this public health and safety crisis within their own communities. The Illinois Opioid Crisis Response Advisory Council (the Council), a statewide stakeholder group whose members represent provider organizations, county health departments, local coalitions, and professional/trade organizations, is currently assessing statewide initiatives and identifying evidence-based practices that might be used across Illinois to address the epidemic. In keeping with its statewide focus, the Council will work with the State of Illinois going forward to develop a strategic implementation plan that includes the specific practices and policies we must put in place to achieve our overall goal.

Participating State Agencies	
Governor's Office	Lieutenant Governor's Office
Criminal Justice Information Authority	Department of Corrections
Department of Financial and Professional Regulation	Department of Healthcare and Family Services
Department of Human Services	Department of Insurance
Department of Juvenile Justice	Law Enforcement and Training Standards Board
Department of Public Health	State Police

Achieving the Overall Goal: Priorities and Strategies

Although statewide efforts have begun moving in the right direction, many challenges remain. Solutions to these challenges—and the opioid crisis itself—will require a comprehensive and coordinated approach that builds on these efforts. The opioid crisis is a community crisis that affects people from all walks of life where they live, learn, work, and play. Active collaboration and engagement—with national, state, and local governments, elected officials, the medical community, providers, insurers, educators, law enforcement, patient advocacy organizations, and the public—will be critical to our success.

To achieve our overall goal, the State developed **nine key strategies** that address **six main priorities**, which fall under the **three pillars** of Prevention, Treatment and Recovery, and Response, as illustrated in the figure on the next page and detailed in following sections.

OVERALL GOAL

**Reduce Opioid-Related Deaths by 33%
Against Estimated Deaths in Three Years**

PREVENTION

A Safer Prescribing and Dispensing

- 1 Increase PMP use by providers
- 2 Reduce high-risk opioid prescribing through provider education and guidelines

B Education and Stigma Reduction

- 3 Increase accessibility of information and resources
- 4 Increase impact of prevention programming in communities and schools

C Monitoring and Communication

- 5 Strengthen data collection, sharing, and analysis to better identify opportunities for intervention

TREATMENT AND RECOVERY

D Access to Care

- 6 Increase access to care for individuals with opioid use disorder

E Supporting Justice-Involved Populations

- 7 Increase the capacity of deflection and diversion programs statewide

RESPONSE

F Rescue

- 8 Increase the number of first responders as well as community members who are trained and have access to naloxone

G Supporting Justice-Involved Populations

- 9 Decrease the number of overdose deaths after an at-risk individual's immediate release from a correctional or other institutional facility

Stakeholder Collaboration

A) Safer Prescribing and Dispensing

Opioids are the most commonly misused type of prescription medication in the U.S. Across the nation, prescription opioid misuse and opioid-related mortality have risen in direct proportion to the significant increase in the volume of opioids being prescribed.^{24,25} In particular, unsafe prescribing and dispensing practices, such as combining opioids and benzodiazepines, greatly increase the risk of opioid use disorder and fatal overdose. Promoting safer prescribing and dispensing practices is an important priority and will be crucial to achieving our long-term goal.

There are two key strategies to help address this priority:

- Increase the percentage of prescribers using the Illinois Prescription Monitoring Program (ILPMP)
- Reduce the volume of inappropriate and high-risk opioid prescribing through improved prescriber education and the use of safe prescribing guidelines

STRATEGY #1: INCREASE PRESCRIPTION MONITORING PROGRAM USE BY PROVIDERS

Rationale

Prescription monitoring programs (PMPs) are state-run electronic databases that collect and distribute data about the prescription and dispensation of controlled substances. They are intended to reduce the rates of prescription drug misuse, diversion, and overdose by curtailing doctor and pharmacy “shopping” by patients. Patients who pursue multiple opioid prescriptions are a small percentage of the opioid-prescribed population, but they are a particularly high-risk group, obtaining on average 32 prescriptions in a 10-month period from an average of 10 prescribers.²⁶ Use of PMP data by providers informs clinical decision-making and can help providers identify patients who are at risk of developing an OUD or who may benefit from treatment intervention. Studies of states where PMP use is mandated for providers have shown decreases in the number of patients seeking prescriptions for the same drugs from multiple providers, overall reductions in opioid prescribing, as well as reductions in overdose death rates.^{27,28,29}

The usefulness of a PMP is limited by the number of providers who actively use it. In the busy setting of clinical encounters, adding an extra step of checking a PMP can be burdensome for providers who are already time constrained, particularly if accessing the database is unwieldy and not easily integrated into provider routines. Efforts to promote increased PMP use by providers should address the issue of integration with health information technology (IT) and electronic health record (EHR) systems.

The IDHS Office of Clinical, Administrative, and Program Support (OCAPS)—Bureau of Pharmacy and Clinical Support Services (BPCSS) oversees the ILPMP. The ILPMP receives controlled substance prescription data from retail pharmacies and allows prescribers and dispensers to view historical data for current and prospective patients. Current estimates indicate that only 18.4% of all potential users in Illinois are actively using the ILPMP. ***Given the influence of PMP use on safer prescribing practices and its potential to reduce opioid misuse and overdoses, there would be great value from increasing the rate of active ILPMP use.***

Current PMP Activities in Illinois

- There are currently several major initiatives underway at the ILPMP, in part supported by the CDC's Prescription Drug Overdose Prevention for States grant awarded to the ILPMP in 2015. These include the following:
 - Collaborating with and providing technical support to health systems wishing to automate ILPMP inquiries. To date, 14 large hospital and clinic systems in Illinois have successfully integrated the ILPMP with their EHR systems
 - Collaborating with major commercial EHR systems to develop add-on software modules and protocols designed to facilitate the implementation of ILPMP integration. To date, the ILPMP is connected to the Epic, Allscripts, Cerner, Meditech, NextGen, Touchworks, and GE Centricity EHR systems
 - Developing training and education materials for providers, dispensers, and patients, as well as educating prescribers on using the ILPMP as standard practice
 - Working with local health departments to increase ILPMP awareness and disseminate regional statistics with a focus on "high-burden" areas, including the 16 lower Illinois Delta Region counties and Cook County
- With the passage of the Heroin Crisis Act, registration with the ILPMP is now required when prescribers renew their controlled substance licenses with the Illinois Department of Financial and Professional Regulation (IDFPR). Use of the ILPMP is still voluntary.

Future Areas of Activity and Exploration

In addition to building on current efforts to increase the use of the ILPMP, it will be important to explore opportunities to develop its capacity further to promote safer prescribing and dispensing and achieve our overall goal of reducing opioid-related mortality.

- Recently, there has been a growing trend of the combined use of opioids with benzodiazepines and other medications that depress the central nervous system.³⁰ These combinations are particularly unsafe and are associated with a much higher risk of fatal overdose. One potential way to address this issue would be to develop a "flagging" system within the ILPMP that would alert prescribers when a patient's prescription includes these combinations.
- Another possible future step is to facilitate increased sharing of ILPMP data with relevant stakeholders, including researchers, to allow for better-informed policymaking, program evaluations, and other data-driven activities at all levels.

STRATEGY #2: REDUCE HIGH-RISK OPIOID PRESCRIBING THROUGH PROVIDER EDUCATION AND PRESCRIBING GUIDELINES

Rationale

Providers often lack training in appropriate prescribing of opioid medications. They may write opioid prescriptions for people who have or are at risk for OUD without adequate medical justification or oversight, contributing to opioid misuse. They may also prescribe high-risk combinations of opioids with other medications, such as benzodiazepines. Opioid prescribing guidelines from the CDC, American Pain Society, Federation of State Medical Boards, the U.S. Department of Veterans Affairs, the American Academy of Pain Medicine, and others are based on current research on the safe and effective use of opioids for acute and chronic pain conditions.³¹ Adherence to prescribing guidelines is associated with reduced opioid overdose deaths and misuse.³² ***Educating prescribers about opioids and prescribing guidelines can save lives.***

Current Opioid Prescribing Education Activities in Illinois

Illinois is currently managing the following efforts related to prescriber education:

- The Illinois Department of Healthcare and Family Services' (IDHFS) Pain Management Program is designed to decrease the inappropriate prescribing of narcotic analgesics for chronic, non-cancer pain. It was developed using evidence-based literature including national guidelines and developed in conjunction with IDHFS' medical advisors in April 2013.
- The Illinois Department of Public Health (IDPH) and the Illinois Office of the Attorney General, in partnership with the University of Chicago, have recently developed a video training module that provides guidance for new prescribers to screen for opioid misuse, monitor patients, and use the ILPMP. This free training is offered to residents and fellows in medicine and dentistry and is also appropriate for medical students and faculty. The training is designed to be incorporated into new prescriber orientation and residency onboarding and has been pushed out to training programs across the state. In conjunction with the development of the training, IDPH has created free pocket cards that provide a snapshot of the guidelines and a link to the ILPMP.

Future Areas of Activity and Exploration

- The Federation of State Medical Boards (FSMB) adopted updated opioid prescribing guidelines in April 2017. These guidelines are based on various state and federal policies, including the guidelines published by the CDC in March 2016, as well as input from relevant medical and policy stakeholders. In Illinois, there are several localized initiatives for prescribing guidelines already underway by various hospitals and health systems, as well as the Illinois Health and Hospital Association (IHHA). Developing and adopting statewide prescribing guidelines in keeping with the updated FSMB guidelines, as well as in consultation with the IHHA and other stakeholders, would be a logical next step to promote safer prescribing statewide. As these efforts progress, the development of context-specific prescribing guidelines, tailored to clinical settings (e.g., emergency rooms vs. hospital inpatient wards vs. clinics vs. long-term care) would also be beneficial.
- IDHFS is considering continuing education efforts to ensure that controlled substance prescribers are appropriately trained and educated on best practices for opioid prescribing.

- Co-prescribing the opioid reversal medication naloxone to patients taking prescription opioids can significantly reduce opioid-related adverse events. One study showed that co-prescription of naloxone to chronic pain patients reduced opioid-related emergency department visits by 63%.³³ California has recently released opioid stewardship guidance for primary care providers recommending the co-prescription of naloxone to all patients receiving opioid medications to treat chronic pain. Developing and promoting similar recommendations for providers in Illinois should be strongly considered.
- Possible future educational measures might include letters to prescribers from IDPH on safer prescribing, the dangers of benzodiazepine/opioid co-prescription, and/or reporting on individual prescribers' levels of opioid prescribing in comparison to peers. Utilizing ILPMP data to identify and target high-risk opioid prescribers could also be beneficial.

B) Education and Stigma Reduction

Successful prevention efforts in public health require broad public awareness, engagement, and participation. Although the increasingly visible impact of the opioid epidemic has brought the issue to the public eye in recent years, we will need to work toward a greater public understanding of its causes, consequences, and scope. Doing so will help us reduce the number of people who begin misusing opioids, connect those with OUD to treatment, and prevent overdose-related deaths. Promoting greater public education regarding opioids and reducing the stigma associated with OUD is an important priority that will be critical to our prevention efforts.

There are two key strategies to help address this priority:

- Increase the accessibility of information and resources
- Increase the impact of prevention programming in schools and communities

STRATEGY #3: INCREASE ACCESSIBILITY OF INFORMATION AND RESOURCES

Rationale

People with OUD often experience a great deal of stigma, and feelings of shame and embarrassment may prevent them from seeking treatment. Public misperception and misunderstanding about the opioid epidemic, OUD, and treatment contribute to this stigma. Educating the general public about the causes of the opioid crisis and OUD—as well as spreading the message that OUD is a chronic disease, that the opioid crisis and OUD are health issues, that treatment works, and that recovery is possible—can help decrease this stigma. Increasing access to evidence-based and non-stigmatizing information and resources can encourage people with OUD to seek help, as well as empower families and friends to connect loved ones who may be misusing opioids to treatment. Making information and resources on specific topics—such as Illinois’ “Good Samaritan Law” with respect to overdoses or Drug Enforcement Agency (DEA) drug take-back events—more publicly available can also enhance community involvement in local prevention and intervention initiatives.

Although a great deal of information and resources regarding the opioid epidemic and OUD exist, much of it is scattered, “siloe,” and thus functionally inaccessible to many, even at a government or organization level. For example, regional and local agencies, community organizations, and other stakeholders may be unaware of state-level information and activities (and vice versa), potentially leading to duplicative and uncoordinated efforts. ***Increasing the accessibility of information and resources for all levels of government, interested stakeholders, as well as members of the general public will be vital to achieving our overall goal.***

Current Public Education Efforts in Illinois

- IDPH shares information on DEA-sponsored drug take-back events. On April 29, 2017, a total of 43,408 pounds of unused prescription drugs—including unused prescription opioids—were collected in Illinois.³⁴
- IDHS/DASA established the Drug Overdose Prevention Program (DOPP) as a result of PA-096-0361 (the Drug Overdose Prevention Law). The DOPP educates and trains first responders—including families and friends of people with OUD—on methods to reduce overdose fatalities,

including the administration of naloxone. To date, DOPP has trained more than 90,000 individuals statewide and 11,646 lives have been saved via naloxone administration.

- The Illinois Department of Insurance (IDOI) published a *Consumer Toolkit for Navigating Behavioral Health with Substance Use Disorders* (SUDs) that consumers can use to ensure their health plan pays for appropriate care. IDOI also launched a Statewide Consumer Education Campaign on Parity in the spring of 2016 to educate Illinois residents on parity coverage issues.
- Various coalitions, task forces, advisory groups, and organizations at the state, regional, and local levels have been very active in coming together over the past few years to share information and resources about the opioid crisis with each other and with the public.
 - Over the past year, the West Side Heroin Task Force has convened town hall meetings with elected officials, state agencies, local organizations, and community members to discuss and answer questions about the opioid epidemic. The last meeting was in April 2017.
 - A coalition of providers and local health departments in Illinois' 33 most southern counties has been convening regularly since 2016 and holding public education summits on the opioid crisis.
 - The Lake County Underage Drinking and Drug Prevention Task Force has created one of the largest prescription drug take-back programs in the U.S. This task force has placed safe disposal boxes in nearly every police department in Lake County. In 2016, the task force collected 10,928 pounds of medications. The DEA is using this program as a national model.

Future Areas of Activity and Exploration

- The State, in consultation with the Illinois Opioid Crisis Response Advisory Council, plans to create a comprehensive website that includes educational materials on opioids, OUD, and treatment; resource lists of how and where to seek treatment; information about existing initiatives addressing the crisis; information about funding opportunities; and other informational materials. The website is intended to be the “go-to” place for Illinois residents—as well as government agencies at all levels, community organizations, and other interested stakeholders—to find accurate, up-to-date information on opioids. The website would also include a feedback mechanism for agencies and organizations to share information, make suggestions, and keep the State apprised of local initiatives. In addition to establishing a website, social media messaging would be a valuable way to reach the general public with educational materials and links to resources.
- As part of the federal Opioid STR award, IDHS/DASA will develop public awareness communication campaigns to address stigma and educate the public regarding the safe disposal and storage of opioids, harmful consequences of opioid misuse (including both prescription opioids and heroin), signs and symptoms of OUD, and availability of OUD treatment.
- The Emergency Medical Services Access Law (EMSA), sometimes referred to as Illinois' “Good Samaritan Law,” ensures that individuals who seek emergency medical assistance for someone who is experiencing an overdose will not be charged or prosecuted for felony possession (within certain limitations).³⁵ However, lack of awareness and misinformation regarding legal liability cause many people to be wary and less inclined to call 911 during an overdose event.³⁶ Although naloxone training is being conducted for all new recruits at the academy level and is made available for experienced officers either through in-house departmental trainings or regional mobile training units,³⁷ some law enforcement officers may be unaware of the drug immunity component of the law, hampering its intended effect and further contributing to misinformation. Educational efforts to increase overall awareness of the Emergency Medical Services Access Law will be critical for getting more individuals to seek help when confronted with an overdose.³⁸

STRATEGY #4: INCREASE THE IMPACT OF PREVENTION PROGRAMMING IN COMMUNITIES AND SCHOOLS

Rationale

88,000 Illinois adolescents per year in 2013-2014 reported using illicit drugs (including heroin) in the past year and 40,000 teens per year reported non-medical use of prescription opioids.³⁹ Parents and other family members sometimes share their unused prescription opioids, unaware of the dangers of non-medical opioid use. Studies suggest that most teens who misuse prescription opioids were given them for free by a friend or relative.^{40,41}

Adolescents are still in the process of physical, social, and emotional development, and they are more likely to take risks, be influenced by their peers, and experiment with illicit substances.⁴² Teen substance use can have a devastating impact on young people's lives, putting them at an increased risk of being arrested, suspended, or expelled from school and for developing physical and mental health problems. Teen substance use also increases the risk of adult substance use,⁴³ and research shows that most adults with substance use disorders began using in their teens.⁴⁴

Preventing adolescent opioid use is critical to resolving the opioid crisis. Prevention efforts should be directed at all age groups; however, priority must be given to efforts that affect youth at or shortly before the times they are most likely to begin to use drugs and alcohol. This crucial time is during the pre-adolescent and adolescent years, ages 10–17. Educating youth about the dangers of opioids *before* they are confronted with decisions about whether to use opioids is ideal. Prevention programs that increase awareness of high-risk situations for substance use and abuse, provide information to change teens' inaccurate beliefs about opioids (e.g., you won't get addicted to heroin if you just snort it), and teach teens resilience skills to resist pressure to use opioids can reduce teen opioid misuse.⁴⁵

Preventing adolescent opioid use is a community effort. Prevention efforts should engage with families, schools, and communities such that the environments in which adolescents live and learn are ones that support growth rather than substance use. Prevention program development should be driven by local data and take into account a community's unique needs and assets to best address the particular factors affecting its rates of opioid use. Community buy-in is critical for sustained support and, ideally, *all* sectors of a community should be involved in building prevention efforts in order to best achieve a meaningful and long-term reduction in opioid misuse.

Current Community-Based Prevention Programming Activities in Illinois

- The Illinois Critical Health Problems and Comprehensive Health Education Act requires classroom instruction on substance misuse for students in grades 5 through 12.⁴⁶ The Illinois State Board of Education (ISBE) makes instructional materials and guidelines available to all Illinois school districts.
- Local coalitions have partnered with school districts to encourage school prevention activities. For example, a community coalition in southern Illinois has created a Youth Advisory Council at Massac County High School.
- IDHS/DASA provides funding to community-based providers to deliver an array of substance misuse prevention services. This statewide program serves Chicago community areas, suburbs, and counties throughout Illinois and is meant to target adolescents, parents, and communities. Required services under this program include prevention programming, communications campaigns, and

other awareness-raising activities that educate communities about prescription drug misuse (including opioid misuse) as well as the safe storage and disposal of prescription drugs.

- IDHS has funded the administration of the Illinois Youth Survey (IYS) biennially since 1993. The IYS is a self-reported survey completed by 8th-, 10th- and 12th-grade students that collects information on youth substance misuse and attitudes toward substance misuse. During survey years, it is freely available to all public and private schools in the state and each participating school can receive a report specific to their own students' responses. These local reports can provide critical information to school administrators, prevention professionals, and community members as they work to address substance use in their communities. In 2014, 892 schools (representing 214,249 youth) took advantage of the opportunity to gather local IYS data.

Future Areas of Activity and Exploration

- The Opioid STR award will help support the Illinois High School Association (IHSA) to provide education and awareness services for high school coaches, athletic directors, and parents about the use of prescription opioids in youth. The IHSA will produce a variety of messages aimed at identifying and combatting opioid misuse among student athletes.
- There are several existing education materials that could be used in school prevention programming:
 - The DEA and Discovery Education have created resources for K-12 students on the effects of prescription opioid and heroin use, toolkits for parents on recognizing the warning signs of and preventing opioid misuse, and a video challenge that encourages youth to create and share their own messages with peers about preventing opioid misuse.
 - The National Institute on Drug Abuse (NIDA) provides a range of free materials tailored to different age groups that educate youth about physiological responses to drugs, the dangers and consequences of drug use, and prevention strategies. These materials also address frequently asked questions from students and present "myth-busting" facts.

C) Monitoring and Communication

One of the most fundamental tools for disease prevention and control in public health is the active monitoring and surveillance of epidemiological data, as well as the communication and sharing of that data. The opioid epidemic is just that—an *epidemic* of a preventable and controllable disease, and optimizing the capacity of our public health surveillance system to inform our prevention efforts will be vital to achieving our goals.

STRATEGY #5: STRENGTHEN DATA COLLECTION, ANALYSIS, AND SHARING TO BETTER IDENTIFY OPPORTUNITIES FOR INTERVENTION

Rationale

A great deal of data around opioid misuse and overdose are already being collected in Illinois in the form of overdose reports, public health surveillance data, PMP data, and public safety data. Building upon and analyzing these data sources, as well as identifying any data gaps, would help us better identify opportunities for intervention. The ability to utilize these data to map out “hot spots” of increased opioid-related activity in real time, for instance, would allow for quicker alerting and allocation of critical resources to communities that are most in need. Additionally, routine sharing of opioid-related data in meaningful ways would support coordination among public health and public safety agencies at all levels. For example, sharing public safety data on particularly poisonous (e.g., fentanyl-laced or otherwise adulterated) illicit drugs being sold in a community can help public health officials to quickly respond via public safety announcements, as well as through alerts to emergency departments and community providers. ***Strengthening the State’s capacity to collect, analyze, and share opioid-related data will allow for more timely and targeted interventions and reduce fatalities.***

Current Monitoring Activities in Illinois and Future Areas for Exploration

- IDPH currently tracks opioid overdose reports as well as all opioid (and other drug-related) hospitalizations and emergency room (ER) visits at the county level. This information is publicly accessible on the IDPH website. Additionally, as part of the state’s syndromic surveillance system, local public health agencies have access to an online dashboard that generates reports on a wide variety of epidemiological markers and measures. The purpose of this dashboard (and syndromic surveillance generally) is for the early detection of increasing trends in illness and continuous awareness of public health situations so that officials can respond quickly before a problem grows larger. IDPH has recently added the ability to track opioid overdoses and opioid-related ER visits to this online dashboard so that local public health agencies can check whether there has been any activity in their area that would indicate an increase in opioid-related activity warranting a further public health response.

Future Areas of Activity and Exploration

- One future step building on current IDPH opioid monitoring activities is to utilize the automated ER reporting infrastructure of the syndromic surveillance system to routinely track different markers of opioid misuse in real time to inform direct responses (e.g., the need for more naloxone access, case management or referrals of treatment services, needle exchange, and disease testing services). Another use would be to assist local health departments with utilizing the alerting feature within the syndromic surveillance system to receive automated notifications of unusual spikes in opioid-related activity in their areas of service.
- Going forward, another potential strategy would be to take overdose data, integrate it with ILPMP data (as well as clinical, administrative, Medicaid, and other relevant data collected by other agencies), and apply predictive analytics to identify measures of possible opioid misuse. Doing so would allow the state to anticipate potential areas of increased opioid misuse and overdose. Several other states (including Michigan, Massachusetts, and Pennsylvania) have recently begun piloting this type of “big data” predictive approach to the opioid epidemic as well.
- As the State of Illinois progresses with its efforts to address the opioid epidemic, it will be important to collect data that tracks our impact. Evaluating outcomes will ensure that the activities undertaken to implement this Plan continue to be evidence based, data driven, and responsive to emerging trends in the epidemic as well as best practices.

Neonatal Abstinence Syndrome

Neonatal Abstinence Syndrome (NAS) refers to the collection of signs and symptoms that occur when a newborn prenatally exposed to opioids experiences withdrawal. The syndrome is primarily characterized by irritability, tremors, feeding problems, vomiting, diarrhea, sweating, and, in some cases, seizures. Infants born with NAS have longer hospital stays and higher hospital charges than infants without NAS. Although the long-term consequences of NAS are not yet well-established, recent research has revealed evidence of adverse outcomes throughout childhood, including mental health and behavioral problems, as well as visual disorders.

Reflective of increasing maternal opioid use, the incidence of NAS has increased sharply over the last decade. The CDC reports a nationwide increase of 400% between 2000 and 2012. More recent Illinois data show that the NAS rate increased by 52% between 2011 and 2016, with a reported (and likely underestimated) 391 newborns in Illinois affected by NAS in 2016. The NAS rate in Illinois is highest among non-Hispanic white infants, infants on Medicaid, and infants residing in urban counties outside Chicago and rural counties.

Recognizing the growing need to address NAS in Illinois, IDPH formed the NAS Advisory Committee in 2015. The Committee is charged with assisting IDPH with developing appropriate and uniform definitions, identification processes, hospital training protocols, and reporting options with respect to NAS, as well as to make recommendations on evidence-based guidelines and programs to improve pregnancy outcomes. Since its creation, the NAS Advisory Committee has met six times and provided two annual reports on its progress.

D) Access to Care

It is well established that treatment for OUD is effective and that individuals can recover and return to full lives in their communities. Ensuring that people with OUD have access to and receive appropriate evidence-based treatment to help them reduce their opioid use as well as handle the emotional and social issues associated with OUD is critical to solving the opioid crisis.

STRATEGY #6: INCREASE ACCESS TO CARE FOR INDIVIDUALS WITH OPIOID USE DISORDER

Rationale

Medication-assisted treatment (MAT) is the use of medications in combination with counseling, behavioral therapies, and other recovery support services for the treatment of SUDs. The most common FDA-approved medications used in the treatment of OUD are methadone and buprenorphine. Taking these medications is analogous to taking medication for diabetes or asthma—they help people manage their disorder so they can maintain their recovery. Using these medications for treatment of OUD is not the same as substituting one addictive drug for another. Once stabilized, patients can live a normal life and do not experience the compulsive thoughts and behaviors that define a substance use disorder. The World Health Organization (WHO), CDC, National Institutes of Health (NIH), and other experts all agree that MAT is essential to treating those with OUD and helping them recover.

MAT saves lives. MAT with methadone and/or buprenorphine* decreases opioid-related deaths and reduces opioid use.^{47,48,49} It also improves birth outcomes for pregnant women with OUD.⁵⁰ Individuals with OUD who receive MAT:

- Are more likely to stay in OUD treatment,^{51,52}
- Are less likely to relapse,^{53,54}
- Have decreased criminal activity,⁵⁵
- Are more likely to find work and keep their jobs,⁵⁶
- Have a decrease in risky behaviors that are associated with HIV or hepatitis C transmission,⁵⁷ and
- Have better social functioning and improved relationships with families and friends.⁵⁸

Recovery support services (e.g., behavioral therapy, peer recovery coaches, 12-step groups, psychiatric consultations) help people with OUD understand and modify their addictive behaviors and treat the mental health symptoms that often accompany OUD and/or relapse triggers. Providing these services in conjunction with medications such as methadone and buprenorphine helps people stay engaged in treatment and cope with social problems related to their opioid misuse.⁵⁹

Virtually no state in the U.S. has sufficient treatment capacity to provide MAT to all the people with OUD who need it. Between 2010 and 2014, Illinois' annual average of treatment provision to individuals 12

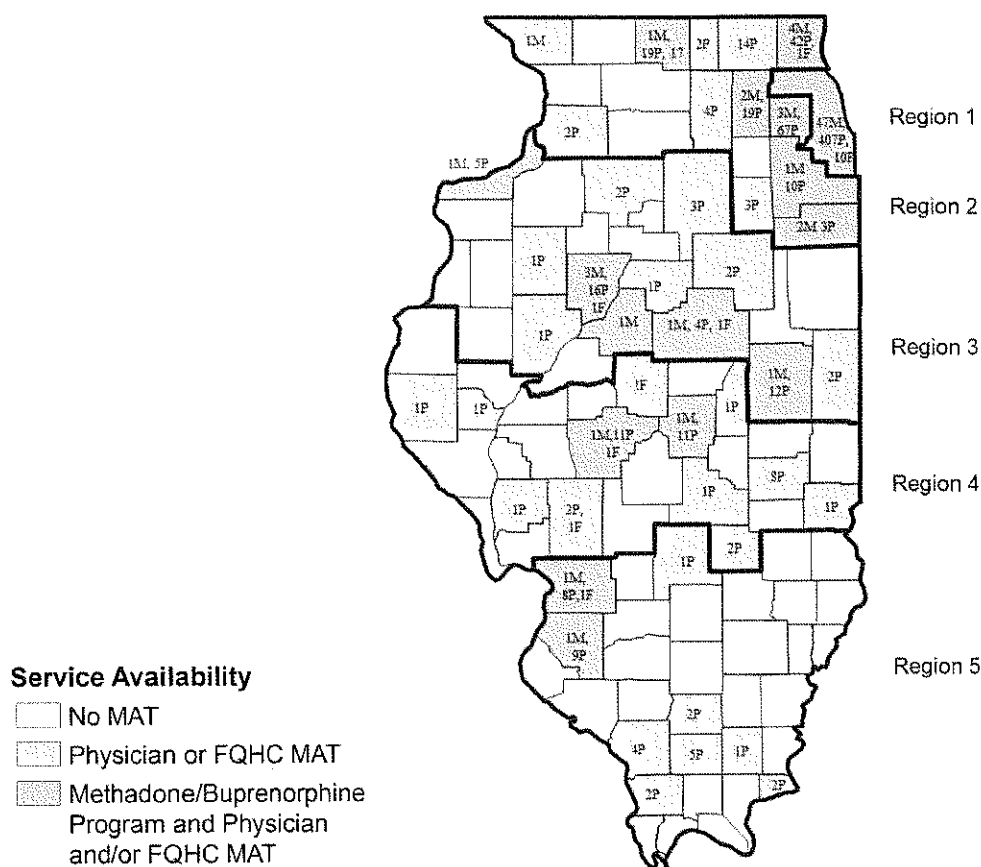
* Another medication used to treat OUD is naltrexone, in particular, extended-release injectable naltrexone (Vivitrol®), which was approved by the FDA to treat OUD in 2010. The ability of Vivitrol to improve outcomes is still being evaluated. Further information about the differences between methadone, buprenorphine, and naltrexone is available in Appendix A.

years and older who misused or were dependent on illicit drugs (including opioids) was 11.7%.⁶⁰ This means that during that period of time, approximately 248,000 Illinois residents per year needed but did not receive treatment for illicit drug use.

MAT, particularly outpatient methadone treatment (OMT), has the potential to save significantly more money than other forms of treatment. The cost savings attributable to MAT arise from a wide range of improvements in the poor health commonly experienced by people with OUD. This includes reduced rates of drug use, increased access to health care and other recovery support services, improved interpersonal relationships and living conditions, and decreased involvement in high-risk behaviors such as injection drug use.

Increasing access to MAT, behavioral therapy, and recovery services across the state will reduce opioid misuse, overdoses, and deaths, as well as give people with OUD the evidence-based treatment they need to regain their quality of life.

Current MAT Availability in Illinois



- The map above shows the availability of MAT services in Illinois. The text in counties shows the number OMT programs (M), physician prescribers of buprenorphine (P), and federally qualified health centers (FQHCs) (F) that provide MAT. Areas in white are counties that have no MAT. As the map illustrates, there are large areas of Illinois where residents have little or no access to MAT.
 - The majority of OMT sites are in Cook County. There are only three OMT sites in IDHS Region 3 and only two in each of Regions 4 and 5.

- Only four FQHCs that provide MAT are in Regions 4 and 5.
- Buprenorphine can only be provided by prescribers who have completed the required training in accordance with the Drug Addiction Treatment Act of 2000 (DATA). Of the 715 physicians in Illinois authorized under DATA to provide buprenorphine (*i.e.*, “DATA-waivered” physicians), 400 are in Cook County, 50 are in Region 4, and 34 are in Region 5 (17 of whom are in two counties—Madison and St. Clair).
- IDHS/DASA licenses 71 OMT providers; 31 of these providers are publicly funded and 40 are privately funded.
- Seventeen FQHCs in Illinois received funding in 2016 from the U.S. Department of Health and Human Services (HHS) Health Resources and Services Administration (HRSA) to expand MAT services for people with OUD.
- Medicaid expansion under the Affordable Care Act has extended treatment for substance use disorders, including OUD, to many patients who would otherwise not be covered, and Medicaid is an essential component of the access-to-care landscape. In Illinois, MAT is available for Medicaid-eligible individuals with OUD without prior authorization mandates or lifetime limits.
- IDHS/DASA is the recipient of a Targeted Capacity Expansion—MAT-Prescription Drug and Opioid Addiction (PDOA) awarded by the SAMHSA Center for Substance Abuse Treatment (CSAT). This project supports the expansion and enhancement of OMT for people with OUD in Cook and Sangamon counties, as well as the Vivitrol[®] Re-entry Program described in Strategy #9.
- In addition to OMT, IDHS/DASA licenses 452 SUD treatment providers and funds a total of 127 providers. The state’s system of care includes case management, recovery support services, detoxification, residential rehabilitation, halfway houses, and recovery homes.

Future Areas of Activity and Exploration

- In October 2016, IDHFS submitted a Medicaid State Plan Amendment (SPA) to allow Illinois to implement the requirement of the Heroin Crisis Act (PA-99-0480) to fully allow reimbursement for outpatient methadone treatment through Medicaid fee-for-service and Medicaid Managed Care Organizations for Medicaid-eligible patients. The SPA was approved on June 30, 2017, and will increase MAT capacity throughout Illinois.
- Vermont has recently implemented a “hub and spoke” model that uses health homes to provide MAT treatment to people with OUD. In this model, individuals with complex needs receive care through a specialty treatment “hub” responsible for coordinating care across the health and substance-abuse-treatment systems of care. Individuals with less complex needs receive care through a “spoke” comprising an MAT-prescribing physician as well as collaborating professionals who provide assistance obtaining a medical home, monitor treatment adherence, and coordinate access to psychosocial supports. This unique care coordination model helps ensure that people with OUD receive MAT along with the behavioral health services they need to support their recovery, and that these services are tailored to their individual needs. Implementing a similar model in Illinois is a potential future strategy to be considered.
- Emergency departments (EDs) offer an excellent opportunity to screen people for OUD and connect them with MAT. People who receive MAT in the ED are more than twice as likely to stay engaged in treatment than people who are referred elsewhere for treatment.⁶¹ Several states (Rhode Island, Connecticut, Massachusetts, New Jersey, and New Hampshire) have implemented programs that send recovery coaches to EDs to meet overdose survivors and offer them support. Promoting the development of OUD screening, MAT referral, and other recovery support programs in EDs is a

possible future step. The Opioid STR award will explore this via a project that will support teams of recovery coaches and counselors in seven Illinois hospitals who will work with patients who present in EDs with symptoms of opioid misuse. These teams will assess patients, create continuing-care plans, and coordinate treatment referrals upon patients' release from the hospital.

Recovery: One Illinoisan's Story

"I grew up on a farm in central Illinois. For more than 20 years, I was an extremely successful businessman. I moved to New Orleans; Hurricane Katrina destroyed everything I had, and FEMA moved me and my family to Jacksonville, IL. I struggled to find work and my wife and I divorced. Alone and hopeless, I started to spiral into hell.

I pulled my back working at a local business. I went to a pain doctor who wrote me a prescription for 90 hydrocodone—three pills a day, every day. I discovered that not only did these pills alleviate my back pain, it also removed my mental pain. I kept going back for more, but when he went out of business a year later, I was out of drugs and out of sources. I started getting sick that day. I threw up, my muscles ached, I was very weak. A friend said it could be fixed and came back with a needle full of liquid. I shot it into me and I felt amazing within seconds. It was heroin. Heroin! The one drug I always said I would never do. I was hooked and there was no way out.

On March 2, 2012, I woke up with my usual morning opioids ready and a pint of vodka to chase it with. I looked at my reflection in the bathroom mirror and I could barely recognize myself. I had hit rock bottom. I picked up the phone and called the Wells Center, but I was told that there were no open beds and I would have to wait a few days. I hung up and locked myself in my bedroom to detox for the next 36 hours. I am told that heroin detox cannot kill you, but I would have paid someone to kill me then. A few days later, I got the call that a bed was available and I rushed over to check myself into treatment. When I got out a month later, I no longer had a home, the bank had repossessed my car, and I had been fired from my job. I lived at a homeless shelter for a week and a half before I realized that Lincoln Land Community College was just down the street. I didn't know what else to do, so at 45 years old, I walked in and asked for help to go back to college. I graduated from Lincoln Land and went on to graduate from the University of Illinois with my Bachelors in Psychology. I am currently working on my Masters in Human Development Counseling at UIS to gain my Professional Counselor License in order to help others who suffer from addiction. I credit AA and mental health counseling for my recovery and for keeping me sober. If I had had access to Suboxone (buprenorphine) when I went into treatment, it would have made detox easier, but it was too expensive and not covered by Medicaid at that time.

We need to make MAT affordable, available, and accessible for everyone. We need to get drugs out of the hands of people who are using. We need more treatment beds, especially for people on Medicaid. We need more drug courts to divert people to treatment, not jail. And we need to realize that recovery takes time: on average, it takes seven attempts for someone to get off heroin and succeed in treatment.

I have had the opportunity to stare addiction in the face and walk away without it taking my life. My story is not unique or different but painfully like many of those who I share this disease with. I just hope someday to be able to share my hope with someone and that it helps them turn the other way."

—Andrew Dewey

E) Supporting Justice-Involved Populations

People with OUD are at an increased risk of being arrested and incarcerated. Once they become involved in the criminal justice system, their options and opportunities for treatment decrease drastically. Recognizing that punishment is not the solution to the opioid epidemic, public safety and public health officials have started to address the needs of individuals whose opioid use is an underlying factor for their criminal behavior. Supporting the needs of this particularly at-risk population will be an important part of achieving our overall goal.

There are two key strategies that address this priority (the second of which is detailed later in this document under Strategy #9):

- Increase the capacity of deflection and diversion programs statewide
- Decrease the number of opioid overdose deaths immediately following release from institutional (and particularly correctional) facilities

STRATEGY #7: INCREASE THE CAPACITY OF DEFLECTION AND DIVERSION PROGRAMS STATEWIDE

Rationale

Treatment for OUD should be more accessible for justice-involved individuals. The opioid crisis is both a public health and a criminal justice issue. Recognizing that increasing arrests of those with OUD will not improve individual and community outcomes, police have become a point of contact for those seeking help by facilitating immediate access to treatment. These deflection and diversion initiatives can help with barriers (e.g., lack of knowledge of available services, shame and stigma, cost and lack of insurance/Medicaid, lack of transportation, long treatment waiting lists) that prevent individuals from receiving treatment.⁶²

Deflection is a promising practice. In deflection models (i.e., pre-arrest diversion models), citizens voluntarily contact police or are contacted via outreach efforts. After contact, individuals are offered treatment without the threat of arrest and are provided with transportation to treatment facilities.^{63,64}

These deflection strategies can reduce overdose deaths, improve lives, and improve police–community relations—all while decreasing the burden on the criminal justice system. As of late 2016, 153 other police departments in 28 states have adopted some form of a deflection model.⁶⁵ The Police Assisted Addiction and Recovery Initiative (PAARI), a nonprofit organization, was developed to support police departments and communities in these efforts.⁶⁶

Post-arrest diversion is an effective practice. Post-arrest diversion initiatives introduce individuals to SUD treatment after arrest, with police officers serving as resources for treatment referrals. Studies show that people who participate in post-arrest diversion programs are less likely to be re-arrested, spend fewer days in jail, and are more likely to stay in treatment.^{67,68,69}

Current Deflection and Diversion Efforts in Illinois

- As of May 2017, there are programs using deflection models in the following Illinois counties: DuPage, Lake, Lee, Livingston, Whiteside, and Will. The Illinois Criminal Justice Information Authority (ICJIA) is evaluating the Safe Passage Initiative operating in Dixon, IL, as well as

Livingston and Whiteside counties. Rosalind Franklin University is evaluating the program A Way Out, which operates in Lake County.

- The Westside Narcotics Diversion and Treatment Initiative (WNDTI), a collaboration between the Chicago Police Department (CPD), the Chicago High-Intensity Drug Trafficking Areas (C-HIDTA) Program, the University of Chicago Health and Crime Labs, and three local service providers—Haymarket Center, Thresholds, and Heartland Health Outreach—began in April 2016. WNDTI is a pilot pre-arrest diversion program in selected Chicago police districts that deflects not only drug users but also nonviolent addicted drug *sellers* into treatment prior to arrest. In the pilot's first year, more than 80 individuals were connected with treatment, and resources have been committed to expanding the initiative.
- For nearly 20 years, drug courts in Illinois have been diverting non-violent defendants with SUDs into highly structured and closely monitored drug treatment programs. There are currently 116 adult drug courts and seven juvenile drug courts in Illinois. Drug court participants commit to treatment and counseling, agree to abide by the rules of the drug court program, undergo random drug testing, and have regular court hearings. Drug courts are supported by Illinois statute (730 ILCS 166 and 705 ILCS 410).

Future Areas of Activity and Exploration

- The Opioid STR grant will support the Cook County Hospital and Health Care System's (CCHHS) Triage Center on Chicago's West Side. The Triage Center will provide specialized screening, linkage care management, and recovery support services for people with OUD, diverting them from jail to treatment. CCHHS runs a similar triage center in Chicago's Roseland neighborhood.
- There have been a number of successful deflection and diversion programs implemented in other states that could potentially serve as models for future activities in Illinois. These include the following:
 - The Law Enforcement-Assisted Diversion (LEAD) program in King County, Washington, is a voluntary post-arrest/pre-booking police diversion program for those facing possible drug or prostitution charges. In the LEAD program, police officers refer individuals to case workers who conduct in-house assessments and connect them with the appropriate services. LEAD participants were less likely to be arrested and incarcerated than a comparison group.⁷⁰
 - The Stop, Triage, Engage, Educate, and Rehabilitate (STEER) program in Montgomery County, Maryland, refers individuals to an on-call community-based case manager for full clinical assessment and referral to SUD treatment.⁷¹ Early results show that more than one-third of STEER participants are successfully engaged in treatment.⁷²
 - The Conversations for Change program in Dayton, Ohio, is a deflection outreach model that invites individuals identified by police as having an SUD or after an overdose to community meetings addressing SUD, treatment options, and other support services.⁷³
 - The Angel Program is a deflection model started by the Gloucester, Massachusetts, Police Department in 2015. The majority of participants in the Angel Program completed treatment and follow-up services, and fewer than half returned to substance use.^{74,75}

F) Rescue

The opioid epidemic is as much a public safety issue as a public health issue. The principal means to reverse an overdose is through the rapid administration of a drug called naloxone. Naloxone is an opioid antagonist medication that can quickly restore breathing, brain function, and save the life of a person experiencing an overdose. Across the country, naloxone is widely used by emergency medical personnel, and studies show that communities with naloxone programs have significantly reduced their number of opioid overdose deaths.⁷⁶ Increasing naloxone availability and training is critical to achieving our overall goal of fewer opioid-related deaths.

STRATEGY #8: INCREASE THE NUMBER OF FIRST RESPONDERS AND COMMUNITY MEMBERS WHO HAVE ACCESS TO AND ARE TRAINED TO ADMINISTER NALOXONE

Rationale

Having more first responders, public safety officers, and community members able to administer naloxone in the event of an opioid overdose will result in more lives saved. In particular, public safety officers are often the first to arrive on the scene of an overdose, and increasing their access to naloxone as well as training them to administer it when necessary is a critical strategy in reducing opioid overdose deaths. In 2015, more than 220 law enforcement agencies in 24 states carried naloxone, with more than 10,000 administered overdose reversals.⁷⁷ In Illinois, although the majority of paramedics and firefighters carry naloxone, comparatively fewer law enforcement officers are trained to administer and carry this life-saving drug.⁷⁸

Current Public Safety Naloxone Efforts in Illinois

- Illinois' Drug Overdose Prevention Law (PA 96-0361) empowered non-medical persons to administer naloxone to individuals experiencing an opioid overdose without risking criminal or civil liability. This law also enabled IDHS/DASA to establish and authorize community programs to distribute naloxone and provide training in its use under its Drug Overdose Prevention Program (DOPP). To date, IDHS/DASA has enrolled 717 program sites in 33 counties into its DOPP and trained more than 90,000 individuals to administer naloxone, resulting in more than 11,000 overdose reversals.⁷⁹
- The Heroin Crisis Act requires all Illinois government agencies employing law enforcement officers and other first responders to stock naloxone, provide their employees with access to it, and establish training programs for its administration.⁸⁰ Additionally, all emergency medical vehicles in the state must carry naloxone. Since passage of the Act, the Illinois Law Enforcement Training and Standards Board has conducted naloxone training for all new recruits and made training available for other officers through departmental or regional mobile unit trainings.⁸¹ Although many police officers currently have access to naloxone per the Act's requirements, they may not carry it.

Future Areas of Activity and Exploration

- After an overdose intervention, some police departments are incorporating a follow-up component that includes law enforcement and/or public health or community service professionals connecting the individual with OUD treatment.⁸² Linking individuals who have overdosed to OUD treatment is key to combatting the opioid crisis, especially since individuals who have previously overdosed are at higher risk of future overdoses.^{83,84} One example of law enforcement linking people who overdose

with treatment is the Camden County Police Department's Operation Save a Life program, which offers those treated for an overdose immediate participation in a 30-day substance use treatment program.⁸⁵

- The Opioid STR award will expand naloxone training for law enforcement agencies in Illinois counties in high need.
- The Heroin Crisis Act expanded access to naloxone under state law, allowing trained pharmacists to dispense naloxone to individuals at risk of overdose, bystanders (e.g., family members and friends of those at risk), and first responders without the need for a prescription. However, because naloxone is still categorized as a prescription medication under federal law—and because reimbursement under some prescription benefit plans, including Medicaid, is denied without a prescription—the intended expansion in access to naloxone has been limited in practice in some areas. Illinois is currently pursuing plans to issue a statewide standing order for naloxone, which would expand naloxone access to individuals and smaller organizations.
- In addition to first responders, community members can play a key role in reversing opioid overdoses. Research has shown that community naloxone distribution programs can reach large populations of high-risk individuals and facilitate large numbers of overdose reversals. In particular, active drug users and individuals who have previously witnessed an overdose are the most likely community members to use naloxone for overdose reversal as well as refill naloxone prescriptions.⁸⁶ Increasing access to (and training regarding) naloxone for community members, including bystanders and active opioid users, will be an important future step in achieving our overall goal.
- Individuals who have been rescued from an opioid overdose remain at risk of future overdose. Unfortunately, many return to using opioids as soon as they leave the hospital. EDs are important access points for reaching individuals with OUD. As described above in Strategy 6, the Opioid STR award will fund teams in seven hospitals to directly connect patients in EDs who have been rescued with community treatment. Additionally, research has shown that the vast majority of patients in EDs at risk of opioid overdose accept take-home naloxone when it is offered.⁸⁷ In addition to developing OUD screening and MAT/recovery support referrals in EDs, implementing take-home naloxone for at-risk patients in EDs may be a future strategy to consider.

Harm Reduction

Harm reduction is a set of pragmatic strategies aimed at reducing the negative consequences of substance use. The goal of harm reduction is to meet substance users “where they are at,” and try to address the conditions of substance use to minimize their harmful effects. In addition to expanding naloxone access and use, harm reduction interventions aimed at opioid misuse might include such activities as opioid overdose education, educating users on safer injection practices (e.g., syringe hygiene, “tester shots” to determine potency and dosage), and needle exchange programs. Research indicates that harm reduction strategies reduce the spread of HIV and hepatitis B and C, minimize other drug-related adverse health effects, are cost-effective, and save lives. Achieving our overall goal of reducing opioid-related deaths will require strengthening overall harm reduction efforts throughout the state.

G) Supporting Justice-Involved Populations

STRATEGY #9: DECREASE THE NUMBER OF OVERDOSE DEATHS AFTER AN AT-RISK INDIVIDUAL'S IMMEDIATE RELEASE FROM A CORRECTIONAL OR OTHER INSTITUTIONAL FACILITY

Rationale

Individuals with OUD who undergo detoxification and a period of abstinence in institutional facilities (e.g., prison, hospitals, residential rehabilitation) are at an increased risk of fatal opioid overdose in the period immediately after leaving these facilities, particularly after release from correctional facilities.^{88,89,90} In the U.S., 65% of individuals in prison meet medical criteria for a substance use disorder, but only 11% receive any type of treatment during their incarceration and fewer still receive evidence-based care.⁹¹ The first month after release from a correctional facility is a period during which individuals are at a greatly increased risk of fatal overdose. This increased risk may be attributable to incarcerated individuals' lowered physical tolerance to drugs as a result of enforced reduction of drug use in prison, as well as their return to negative support systems following release. Formerly incarcerated individuals' return to such milieus can trigger relapse to drug use, putting them at an increased risk of overdose.^{92,93}

There is a need for additional treatment for SUD in the justice-involved population. Prison-based treatment followed by aftercare in the community can reduce recidivism and save money over time.⁹⁴ In Illinois, half of all individuals entering IDOC were identified as in need of substance abuse treatment; however, less than a third of those needing treatment received any in prison.⁹⁵ Despite evidence for its efficacy, limited community resources and a lack of coordination among agencies involved in prison-to-community transition services means that post-release treatment is infrequently provided or not provided at all. Lack of valid state identification and difficulties obtaining health insurance are often significant obstacles to treatment for formerly incarcerated individuals. Additionally, when these individuals are forced to wait for a significant period to access treatment, they become less likely to begin treatment at all.⁹⁶

There is a need for additional MAT in the justice-involved population. Although research has shown that MAT is effective and evidence based, it has not been widely adopted in correctional facilities. Of state prison systems nationwide, only 45% provide inmates with referrals to methadone clinics and only 29% provide inmates with referrals to buprenorphine-therapy clinics upon release.⁹⁷ ***Ensuring that MAT is available after release from jail or prison will improve continuity of care in the community; reduce recidivism, relapse, and overdose; increase the quality of life for the justice-involved population; and build the foundation for improving system-wide outcomes.***

Current Efforts in Illinois to Reduce Overdose Deaths Upon Release

- IDOC operates 25 adult state correctional centers (CCs) and provides services to inmates with medical and behavioral health treatment. Currently, IDOC operates 11 facilities where SUD treatment is provided.⁹⁸
- In Illinois, a DASA-funded MAT Vivitrol Re-entry Program (administering extended-release injectable naltrexone only) operates at one facility—Sheridan CC. This program involves prison-based treatment at Sheridan CC through the WestCare Foundation (Illinois) and case management after

release through Treatment Alternatives for Safe Communities (TASC). DASA also supports the Vivitrol Re-entry Program in Cook County Jail through Cermak Health Services.

- Within the Illinois Department of Juvenile Justice (IDJJ), all youth are assessed for substance misuse treatment needs at the time of admission. IDJJ offers SUD treatment in all five of its youth correction facilities (Illinois Youth Centers or IYCs) using the Evidence-Based Forward Thinking curriculum. IDJJ offers an inpatient-like therapeutic community setting at IYC St. Charles, IYC Harrisburg, and IYC Chicago, as well as an outpatient-like treatment setting at IYC Warrenville and IYC Pere Marquette. Additionally, IDJJ provides targeted relapse prevention services to individual youth based on treatment needs as well as follow-up referrals and support for youth as they transition back into the community upon release. For particularly high-risk youth, IDJJ also provides more intensive community supervision and support upon re-entry.⁹⁹
- The Medicaid 1115 Demonstration Waiver seeks to ensure that justice-involved individuals are linked with and have relationships with community treatment providers *before* they are released from Illinois correctional facilities. Initiatives under the waiver will restructure intake, pre-release, and release procedures for individuals from IDOC and Cook County Jail to ensure that all Medicaid-eligible individuals are enrolled upon release and auto-assigned/enrolled to a managed care organization at the earliest possible point. These measures will ensure that individuals are linked with and have immediate access to needed OUD treatment upon release.

Law Enforcement: Addressing the Supply of Opioids

The supply of illicit opioids is a significant driver of the opioid crisis, particularly given the increasing prevalence of fentanyl and other synthetic opioids in illegal markets. Opioid trafficking contributes to violent crime and increases the availability of opioids, subsequently leading to increased negative outcomes and deaths. Law enforcement plays a critical role in addressing opioid trafficking and impacting the supply of illicit opioids.

Law enforcement combats trafficking by investigating and prosecuting illicit opioid distribution networks and making drug seizures. Multi-jurisdictional drug task forces, comprising law enforcement officers from state, county, and local police departments can pool resources and combat drug distribution networks more efficiently and effectively. These task forces work closely with federal agents (*e.g.*, DEA, FBI, ATF, ICE, USFIS) in investigating distribution networks, including the tracing of drug sources to other states and countries. There are currently 22 narcotics teams working throughout Illinois (nine metropolitan enforcement groups and 13 task forces), 19 of which received federal funding administered by ICJIA in federal fiscal year 2016.

Chicago is a High Intensity Drug Trafficking Area (C-HIDTA) that facilitates cooperation among federal, state, and local agencies to share information and implement coordinated enforcement activities. C-HIDTA provides resources, funding, and analytical support to an array of initiatives in Chicago aimed at the opioid crisis. Among these is the Fentanyl Response Initiative (FRI), which was started in 2016 as a collaboration between C-HIDTA, the Chicago Police Department, the Illinois State Police, and the DEA. The FRI uses several sources to track and map locations in Chicago where fentanyl is being distributed. Enforcement activities are then directed to these locations to interdict drug trafficking organizations, reduce the flow of fentanyl, and reduce fatal overdoses.

As the State of Illinois progresses toward the goal of reducing opioid deaths, it will be critical to support and work in parallel with existing law enforcement efforts directed at reducing the supply of illicit opioids.

Future Areas of Activity and Exploration

- The Opioid STR grant will support four IDHS/DASA-licensed treatment providers to provide pre-release case management services, Vivitrol, and post-release linkage services to persons with OUD who are incarcerated in Illinois county jails in areas of high need.
- The National Commission on Correctional Health Care (NCCHC) supports increased access to and use of naloxone in correctional facilities.¹⁰⁰ NCCHC recommends that correctional and medical staff undergo training that includes education regarding opioid overdose and its signs; correct technique for the administration of naloxone; and essential related procedures, including the performance of cardiopulmonary resuscitation and emergency transfer of the inmate to a facility equipped to treat overdose. Adopting some of these recommendations in Illinois correctional facilities could be a potential future strategy to consider.
- New York has piloted a program in which incarcerated individuals are given training in overdose recognition and response as well as provided with naloxone upon release. Implementing similar naloxone training and take-home naloxone programs in Illinois correctional facilities is a potential future strategy that would reduce overdose deaths of at-risk individuals upon community re-entry.

Next Steps

The strategies proposed in this Plan represent the shared consensus and commitment of the State of Illinois to reduce opioid-related deaths by 33% in three years. This Action Plan has set out what Illinois needs to do and why we need to do it. Over the coming months, the State will actively collaborate with other key stakeholders, including the Opioid Crisis Response Advisory Council as well as stakeholders representing minority communities of high need, to build on this framework. We anticipate announcing a more detailed implementation plan thereafter.

Although the State has chosen to focus our overall goal on reducing opioid-related deaths, we recognize that the suffering caused by the epidemic extends beyond just the number of fatalities. Preventing opioid misuse and OUD in the long term will require not only increased awareness of the dangers of opioid misuse in particular, but also persistent efforts to reduce stigma and achieve a broader cultural shift in how we converse about substance misuse in general. Addressing the needs of individuals with OUD will also require sustained investment. The process of beginning and maintaining recovery from OUD requires access to quality care and ongoing services, similar to that of other chronic diseases such as hypertension and diabetes. Like these other chronic conditions, individuals with OUD must have adequate support throughout their lifetime to help them through potential threats to their recovery. To fully address the epidemic, we must continue to strengthen our treatment systems to ensure that people with OUD have access to the services and supports they need to not only attain but also maintain recovery.

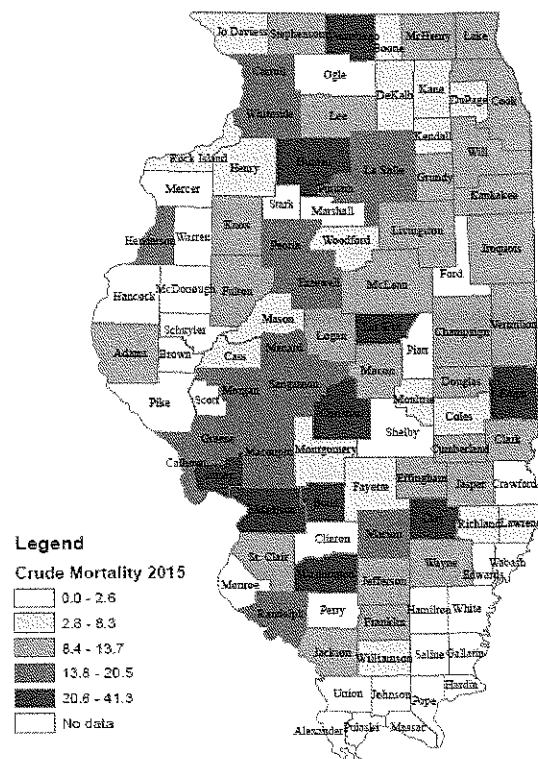
Implementing the strategies in this Plan and reducing the number of opioid-related deaths will not mean that the crisis will have been solved. The opioid epidemic developed out of many complex and interacting factors over several decades, and it will require a great deal of sustained collaborative effort to turn the tide. As we move forward with this effort, we will need to pay attention to what the data tell us, be responsive to emerging trends in the environment and changes in best practices, and continue to set ambitious goals to advance the health and well-being of the people of Illinois.

Appendix 1: Further Information, Data, and Statistics

THE OPIOID EPIDEMIC

- August 2017 provisional data from IDPH show a 48.8% increase in all drug overdose deaths and a 76.2% increase in opioid overdose deaths from 2013 to 2016. Opioids were a contributing factor in 68% of drug overdose deaths in 2013 and in 80% of drug overdose deaths in 2016. The number of heroin deaths has nearly doubled since 2013: There were 583 heroin-related deaths in 2013 and 1,008 deaths in 2016. The number of opioid analgesic deaths has almost quadrupled: There were 344 opioid analgesic deaths in 2013 and 1,233 deaths in 2016. Opioid analgesics encompass prescription opioids and include natural and semi-synthetic opioid analgesics (e.g., morphine, codeine, oxycodone, hydrocodone, hydromorphone, oxymorphone).
- As the 2015 map below illustrates, the opioid crisis is not a problem confined to metropolitan Chicago—it is an issue that affects communities and individuals throughout Illinois.

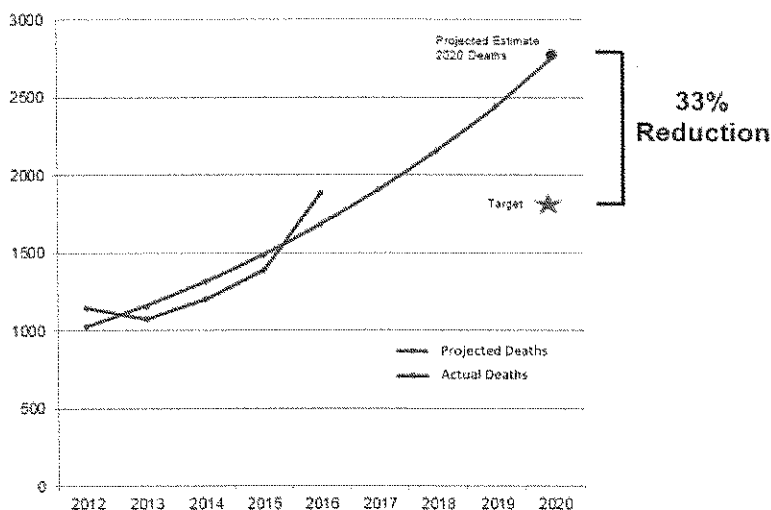
Opioid Overdose Related Crude Mortality Rate
(per 100,000 population) 2015, Illinois





OPIOID OVERDOSE DEATHS IN ILLINOIS: THE DATA AND THE GOAL

Year	Actual Deaths	Projected Deaths
2012	1149	1021
2013	1072	1157
2014	1203	1310
2015	1382	1484
2016	1889	1680
2017		1903
2018		2155
2019		2441
2020		2765



Projected overdose deaths were estimated using overdose data from prior years and applying a best fit model. As can be seen, overdose deaths are increasing exponentially, and in 2016, actual overdose deaths exceeded projections by more than 200.

ADOLESCENT OPIOID USE AND MISUSE

- In 2015, 276,000 adolescents in the U.S. were current non-medical users of opioids, with 122,000 reporting an addiction to prescription opioids.¹⁰¹ An estimated 21,000 adolescents had used heroin in the past year and an estimated 5,000 were current heroin users.¹⁰² Approximately 88,000 Illinois adolescents per year in 2013-2014 reported using illicit drugs (including heroin) in the past year and 40,000 teens per year reported non-medical use of prescription opioids.¹⁰³
- Studies suggest that involvement with substance use early in life increases the risk of use and abuse later in life.¹⁰⁴ The majority of substance use treatment admissions among individuals aged 18-30 report beginning substance misuse in their adolescent years, highlighting the importance of interventions targeted toward youth and their families to promote prevention.¹⁰⁵ Easy access to prescription opioids in the household has also been shown to be a risk factor for developing an SUD.

PRESCRIPTION MONITORING PROGRAMS

■ Research

Analysis of aggregate Medicaid utilization data in 20 states using PMPs found reductions of 9%–10% in Schedule II opioid prescriptions among states that included a mandate.¹⁰⁶ Individual states have also documented positive outcomes. In a one-year period, New York state had a 75% drop in patients seeking prescriptions for the same drugs from multiple providers. In Florida, the combination of PMP requirements and a regulation that prohibited dispensing opioids from health care offices saw a 52% decrease in oxycodone overdose deaths over a two-year period.¹⁰⁷ A study of Ohio emergency departments using PMP data found that 41% of providers changed their opioid prescribing practices after reviewing data, with 61% prescribing fewer or no opioids than initially planned.¹⁰⁸

■ **PMP Use in Illinois: The Numbers**

As of April 2017, 34,000 users (24,000 of which were prescribers) were enrolled in the ILPMP out of an estimated 114,000 potential users. Of these users, only 21,000—18.4% of all potential users in the state—were actively using the ILPMP.

NALOXONE

■ **Research**

A study of 2,912 opioid users at risk of overdose and 19 communities over seven years found that communities with naloxone programs had significantly reduced opioid overdose fatalities. A meta-analysis of 21 studies found that naloxone training and education programming led to higher survival rates when implemented in communities.¹⁰⁹

■ **Naloxone Access in Illinois: The Numbers**

- The Drug Overdose Prevention Law (PA 096-0361), passed in January 2010, made it legal in Illinois for non-medical persons to administer naloxone to another individual to prevent an opioid overdose fatality. This Act also allowed IDHS/DASA to establish and authorize programs to distribute naloxone. IDHS/DASA has since developed processes and guidelines to assist programs with operating as “enrolled programs” under its Drug Overdose Prevention Program (DOPP). To date, IDHS/DASA has enrolled 717 program sites in 33 counties. In addition, more than 90,000 individuals have been trained to administer naloxone, which has resulted in more than 11,000 overdose reversals.¹¹⁰
- A 2016 survey of Illinois police chiefs and sheriffs found 34% of responding law enforcement agencies reported they had no officers trained to administer naloxone. By contrast, of the responding agencies, 92% reported paramedics and 63% reported firefighters in their respective jurisdictions carried naloxone. In the same study, of law enforcement agencies who reported heroin or prescription drugs to be very problematic in their area, 38% reported that none of their officers carried naloxone and 25% reported that their officers were not trained in administering naloxone.¹¹¹

TREATMENT AND RECOVERY: ADDITIONAL INFORMATION ABOUT MEDICATION-ASSISTED TREATMENT

- **Methadone vs. buprenorphine:** Both methadone and buprenorphine are opioid agonist medications that are used as long-term maintenance therapy to assist with treatment of OUD (methadone is a full agonist and buprenorphine a partial agonist). The efficacy of methadone/buprenorphine-assisted treatment in treating OUD has been well established. Both of these medications have been shown to similarly improve outcomes, but most studies suggest that methadone-based treatment is associated with higher rates of patient retention. Methadone is also less expensive than buprenorphine. On the other hand, buprenorphine has been shown to be somewhat safer than methadone during the initiation of treatment and is associated with less sedation and respiratory depression. Buprenorphine is also theoretically more accessible than methadone, as trained physicians that are “waivered” under the Drug Treatment Act of 2000 (DATA) are authorized to provide it in-office (by contrast, methadone is more tightly regulated and can only be provided in a licensed methadone clinic).¹¹²
- **Naltrexone** is an opioid antagonist that blocks the effects of opioids.¹¹³ A patient must be detoxed and opioid-free for 7 to 10 days prior to the initiation of naltrexone. While naltrexone has been approved for the treatment of OUD since the 1980s, in the form of oral daily pills, adherence is generally poor and oral naltrexone for treating OUD has been found to not be any superior to placebo or no medication at all.¹¹⁴ Extended-release injectable naltrexone (Vivitrol) was approved by

the FDA for OUD treatment in 2010 and has been shown to be more effective at preventing relapse than placebo,¹¹⁵ but there have been no studies directly comparing its efficacy as compared to methadone or buprenorphine. In the justice-involved population, Vivitrol has been shown to possibly decrease the rate of relapse and increase the median time to relapse.¹¹⁶ The inhibition of any physical response to opioids by naltrexone means that an opioid “high” is practically impossible to achieve while naltrexone is active in the body and overdose risk is significantly reduced. However, extended periods of abstinence from opioids, whether pharmaceutically induced by Vivitrol or otherwise, decreases physical tolerance to opioids, which greatly increases an individual’s risk of fatal overdose in the event of a relapse (*i.e.*, if an individual relapses when there is no active naltrexone in their body).¹¹⁷ Additionally, the blockade of opioid receptors by naltrexone is not insurmountable. Patients who take large amounts of opioids in an attempt to overcome the opioid blockade could possibly face fatal overdose.

TREATMENT AND RECOVERY: ACCESS TO CARE IN ILLINOIS

- In Illinois during state fiscal year (SFY) 2015, 14,282 primary opioid admissions (accounted for by 9,942 individual patients) were to levels of care other than detoxification.
- In SFY 2015, there were 66,427 total admissions to IDHS/DASA-funded treatment services. A total of 19,289 (29%) of these admissions were for individuals who indicated opioids as their primary substance of abuse. Only 14.9% of these primary opioid admissions to IDHS/DASA were accounted for by admissions to OMT.
- IDHS/DASA currently funds 5,631 OMT slots throughout Illinois. During SFY 2015, 2,125 people with OUD were admitted to OMT through these state-supported slots. The differential between the number of slots and the number of annual admissions is attributable to the length of time that most OMT clients remain in treatment. A total of 7,530 unduplicated clients were served through state-supported OMT in SFY 2015.

OPIOID OVERDOSE DEATHS FOLLOWING RELEASE FROM A CORRECTIONAL FACILITY

■ **Research**

- There is an increased risk of drug-related death immediately after release from prison, particularly in the first two weeks after release and extending into the second two weeks. In a meta-analysis of six studies, there was a three- to eightfold increased risk of drug-related death in the first two weeks after release from prison compared with the subsequent 10 weeks.¹¹⁸
- Incarcerated individuals frequently return to environments that strongly trigger relapse to drug use and put them at risk of an overdose. In a qualitative study of formerly incarcerated individuals, researchers found the social isolation from friends and family members who were still actively using was particularly difficult after release.¹¹⁹ Interventions to prevent overdose after release from prison may benefit, such as structured treatment with gradual transition to the community, enhanced protective factors, and reductions of environmental triggers to use drugs.

■ **Substance Use Disorder and Justice-Involved Individuals in Illinois: The Numbers**

- In Illinois in 2016, 52% of persons entering IDOC were identified as needing substance use treatment. However, only approximately 30% received treatment in prison.¹²⁰ Between 2016 and 2017, out of 928 youths assessed in IDJJ facilities, 755 had a substance use disorder, and 57 had OUD.¹²¹
- A 2011 Illinois study found inmates who successfully completed or were still enrolled in post-release aftercare had a 44% lower likelihood of recidivism than a comparison group.¹²²

DIVERSION PROGRAMS: EARLY SUCCESSES

- In the first year of operation of the Gloucester Angel Program in Massachusetts, 376 individuals presented to the Gloucester Police Department for assistance. In 94.5% of these cases, police were able to offer direct treatment placement. And of those offered placements, 95% entered their assigned program.^{123, 124}
- Four evaluations of the Law Enforcement-Assisted Diversion (LEAD) program in Washington have shown positive initial results. Research found statistically significant differences in recidivism between LEAD participants and a comparison group. LEAD participants had 60% lower likelihood of arrest at six months than a comparison group. After four years, LEAD participants were 58% less likely to be arrested compared to the control group. On average, LEAD participants had 1.4 fewer jail bookings per year, spent 39 fewer days in jail per year, and had 87% lower odds of at least one period of incarceration after entry into LEAD.^{125, 126}
- Another example of a pre-arrest diversion model featuring police outreach is the Arlington Opioid Outreach Initiative in which behavioral health practitioners proactively contact individuals identified by police as having an SUD or having experienced an overdose. Researchers from the Boston University School of Social Work are evaluating the program.¹²⁷

Appendix 2: Illinois Opioid Crisis Response Advisory Council Members[†]

Illinois Opioid Crisis Response Advisory Council Members	
ADAPT Pharma	Jonathon Bloomfield, Senior Director of Government Affairs
Administrative Office of the Illinois Courts	Kelly Gallivan-Illaraza, Problem Solving Court Coordinator Richard Adkins, Assistant Director
Alkermes	Adam Rondeau, Director, Policy & Government Relations
AMITA Alexian Brothers Neurosciences Institute	Ankur Dave, MD, Interventional Pain Management Specialist
Bartonville Police Department	Brian Fengel, Police Chief
Catholic Charities of the Archdiocese of Chicago	Debbie Shepard, Program Director
Center for the Application of Prevention Technologies	Chuck Klevgaard, Regional Coordinator Erin Ficker, Associate Coordinator Central Region
Champaign County Coroner	Duane Northrup, Coroner
Chestnut Health Systems	Russ Hagen, CEO Alan Markwood, Corporate Director of Prevention Services Donna Nahlik, Director Joan Hartman, Vice President of Behavioral Health Chris Scott, Director, Lighthouse Institute
Chicago High Intensity Drug Trafficking Area	Nicholas Roti, Executive Director Nicole Fox, Counterdrug Intelligence Analyst
Chicago Recovery Alliance	Dan Bigg, Director
Chicago Urban League	Kathie Kane-Willis, Director of Policy
Chicago Department of Public Health	Elizabeth Salisbury-Afshar, MD, MPH, FAAFP, FASAM, Medical Director
Cook County Health and Hospital Systems	Stephen Aks, DO, Toxicology Director, Department of Emergency Services Juliegh Nowinski-Konchak, MD, Physician Lead Kathy Chan, Director of Policy Leticia Reyes-Nash, Director of Programmatic Services and Innovation
Cook County Medical Examiner's Office	Ponni Arunkumar, Cook County Medical Examiner
Community Behavioral Healthcare Association of Illinois	Marvin Lindsey, Chief Executive Officer Blanca Campos, Public Policy Associate
DePaul University & Chicago Recovery Alliance	Suzanne Carlberg-Racich, Assistant Professor Outreach & Research
Dixon Police Department	Danny Langloss, Chief

[†] The Council is the statewide group that will work with the State to develop the implementation plan—the next step in our state response to the opioid epidemic. Membership list as of June 2017, collected via Council meeting attendance logs. Membership in the Council is open to **all** interested stakeholders.

Illinois Opioid Crisis Response Advisory Council Members	
DuPage County Coroner	Richard Jorgensen, Coroner
DuPage County Health Department	Karen Ayala, Executive Director Chris Hoff, Assistant Director of Community Health Resources Mila Tsagalis, Director of Community Initiatives
Drug Enforcement Agency, Chicago Field Division	Daniel J. Gillen, Diversion Program Manager Dennis Wichern, Special Agent in Charge
Helen Wheeler Center for Community Mental Health	Jackie Haas, President/CEO
Heritage Behavioral Health, Inc.	Bruce Angleman, Association Representative
Illinois Academy of Family Physicians	Vincent D. Keenan, Executive Vice President
Illinois Advisory Council on Alcoholism and Other Drug Dependency	Ron Vlasaty, Chairperson
Illinois Association of Behavioral Health	Sara Howe, CEO Eric F. Foster, Vice President, Substance Abuse Policy and COO
Illinois Association of Chiefs of Police	Ed Wojcik, Executive Director
Illinois Association of Rehabilitation Facilities	Emily Miller, Director of Policy for Behavioral Health
Illinois Board of Higher Education	Cindy Deitsch, Secretary to the Board
Illinois Board of Nursing	Jerry Miller, Board Liaison
Illinois Coroners and Medical Examiners Association	Amy Winas, President
Illinois Criminal Justice Information Authority	John Maki, Executive Director Jessica Reichert, Research Manager
Illinois Department of Child and Family Services	George Sheldon, Director Sam Gillespie, AOD Administrator
Illinois Department of Corrections	John N. Nunley, Manager Addiction Recovery Services Tracey B. Williams, Assistant to the Director
Illinois Department of Financial and Professional Regulation	Bryan Schneider, Secretary Jessica Baer, Acting Director Alex Cooper, Associate General Counsel Brian S. Zachariah, Chief Medical Coordinator
Illinois Department of Healthcare and Family Services	Felicia Norwood, Director Arvind Goyal, Medical Director Kristine Herman, Bureau Chief, Behavioral Health Mark Huston
Illinois Department of Human Services	James Dimas, Secretary Fred Flather, Chief of Staff

Illinois Opioid Crisis Response Advisory Council Members

Illinois Department of Human Services, Division of Alcoholism and Substance Abuse	Maria Bruni, Acting Assistant Secretary of Programs, Acting Director Division of Alcoholism and Substance Abuse Danielle Kirby, Deputy Director Richard Sherman, Opioid STR Project Director Richard Weisskopf, Program Manager Rosie Gianforte, Prevention Program Coordinator Kimberly Fornero, Bureau Chief, Prevention and Program Services Seth Eisenberg, Medical Director
Illinois Department of Human Services, Division of Developmental Disability Services	Greg Fenton, Director
Illinois Department of Human Services, Division of Family and Community Services	Diane Grigsby Jackson, Director Karrie Rueter, Associate Director, Office of Community and Positive Youth Development
Illinois Department of Human Services, Division of Mental Health	Diana Knaebe, Director
Illinois Department of Human Services, Illinois Prescription Monitoring Program	Meta Jo Floyd, PMP Director Craig Berberet, PMP Manager Sarah Pointer, Clinical Manager Edward Dowllar, Clinical Database Coordinator Michael Patton, OCAPS Director Stan Murzynski, IT Director
Illinois Department of Human Services, Office of Innovation, Strategy, and Performance	Bruce Bendix, Director Matt Coyne, Lead Analyst
Illinois Department of Human Services, Office of Legislation	Jennifer Aring, Director of Legislative Affairs JB Meier, Deputy Director of Legislative Affairs Gloria Simmons, Legislative Affairs Liaison
Illinois Department of Insurance	Matt Ryan, Chief of Staff Carol West, Regional Outreach Coordinator
Illinois Department of Juvenile Justice	Heidi Mueller, Director Debi Rauch, Regional Director Wells Center
Illinois Department of Public Health (IDPH)	Nirav D. Shah, MD, JD, Director Donald G. Kauerauf, Assistant Director Jennifer Layden, MD, Chief Medical Officer Mai Pho, MD, MPH, Medical Advisor for Health Research and Policy Amanda Kim, JD, Head of Strategic Health Initiatives Allison Hasler, Health Officer
Illinois General Assembly	Lou Lang, Representative 16 th District, Assistant Majority Leader Mattie Hunter, Senator 3 rd District
Illinois Health and Hospital Association	Michael Wahl, Medical Director
Illinois Law Enforcement Alarm System	Dave Fellows, Regional Planning Coordinator
Illinois Mental Health Collaborative	Trenda Hedges, Recovery Team Manager
Illinois Nurses Association	Alice Johnson, Executive Director Julia Bartmes, Staff Specialist Atty
Illinois Pharmacist Association	Garth Reynolds, Executive Director Tim Oyer, Student Pharmacist

Illinois Opioid Crisis Response Advisory Council Members

Illinois Primary Health Care Association	Rajesh Parikh, MD, Vice President, Clinical Services and Workforce Development
Illinois Psychiatric Society	Meryl Sosa, Executive Director
Illinois Sheriffs Association	Michael McCoy, President
Illinois Society for Advanced Practice Nursing	Susan Swart, Executive Director
Illinois State Board of Education	Tony Smith, PhD, State Superintendent Jessica Gerdes, Principal Consultant
Illinois State Dental Association	Greg Johnson, Executive Director
Illinois State Medical Society	David Porter, VP Health Policy
Illinois State Police	Leo Schmitz, Director Chad Peterson, First Deputy Director James O'Grady, Chief of Staff
John Howard Association	Jenny Vollen-Katz, Executive Director Maya Szilak, Policy & Research Specialist
Lake County Health Department	Martin Clancy, Project Coordinator Nick Caputa, Associate Director
Lake County Opioid Initiative	Adam Rubinstein, MD, President
Lake County Sheriff's Office	Antonietta Simonian, Communications/Data Specialist
Largent Government Solutions	Phillipe Largent
Linden Oaks Behavioral Health Services	Aaron Weiner, Director, Addiction Services
Live4Lali	Chelsea Laliberte, Executive Director
Madison County Coroner	Stephen P. Nonn, Coroner
Mason County Health & Housing Department	Curt Jibben, Administrator/CEO
Medical Cannabis Alliance for Illinois	Bresha Brewer, Executive Director
Office of Governor Bruce Rauner	Rodger Heaton, Public Safety Director
Office of Lieutenant Governor Evelyn Sanguinetti	Susan Bence, Springfield Director & Legislative Liaison
Office of the State Fire Marshal	Greg Hay, Fire Service Outreach Coordinator
Perfectly Flawed Foundation	Luke Tomsha
Popovits Law Group	Renee Popovits, Principal Attorney
Positive Sobriety Institute	Fran Langdon, MD, Medical Consulting Physician
Prevent Child Abuse Illinois	Ron Harley, Director
Prevention First	Karel Homrig, Executive Director
Rock Island County Coroner	Brian Gustafson, Coroner
Substance Abuse and Mental Health Services Administration	Jeffrey A. Coady, Regional Administrator

Illinois Opioid Crisis Response Advisory Council Members

Southern Illinois Healthcare	Woody Thorne, Vice President of Community Affairs Sherrie Harlow, Director Angie Bailey, Community Benefits Manager
Southern Illinois University, School of Medicine	Kim Sanders, Director, Center for Rural Health and Social Service Development
The Chicago School of Professional Psychology, Naomi Ruth Cohen Institute for Mental Health Education (NRCI)	Kate Mahoney, Executive Director
Treatment Alternatives for Safe Communities, Inc.	Sherie Arriazola, Director of Payer and Healthcare Strategy
University of Illinois at Chicago, Community Outreach Intervention Projects	Antonio D. Jiménez, Associate Director Maria Nava, Data Manager
University of Illinois at Chicago, Jane Addams College of Social Work	James Swartz, PhD, Associate Professor
University of Illinois at Chicago, School of Public Health	Lawrence J. Ouellet, PhD, Research Professor
Village of Downers Grove	Kathy DesMarteau, Grants Coordinator
Will County Executive	Nick Palmer, Chief of Staff Kathleen Burke, Project Coordinator
	Maya Doe-Simkins, Consultant (no organizational affiliation)

List of Abbreviations

BPCSS: Bureau of Pharmacy and Clinical Support Services

CC: Correctional Center

CCHHS: Cook County Hospital and Health Care System

CDC: Centers for Disease Control and Prevention

C-HIDTA: Chicago High-Intensity Drug Trafficking Area

CPD: Chicago Police Department

CSAT: Center for Substance Abuse Treatment

DASA: Division of Alcoholism and Substance Abuse

DATA: Drug Addiction Treatment Act

DEA: Drug Enforcement Agency

DOPP: Drug Overdose Prevention Program

ED: Emergency Department

EHR: Electronic Health Record

ER: Emergency Room

FDA: U.S. Food and Drug Administration

FQHC: Federally Qualified Health Center

FSMB: Federation of State Medical Boards

HHS: U.S. Department of Health and Human Services

HRSA: Health Resources and Services Administration

ICJIA: Illinois Criminal Justice Information Authority

IDFPR: Illinois Department of Financial and Professional Regulation

IDHFS: Illinois Department of Healthcare and Family Services

IDHS: Illinois Department of Human Services

IDJJ: Illinois Department of Juvenile Justice

IDPH: Illinois Department of Public Health

IDOC: Illinois Department of Corrections

IDOI: Illinois Department of Insurance

IHHA: Illinois Health and Hospital Association

IHSA: Illinois High School Association

ILPMP: Illinois Prescription Monitoring Program

ISBE: Illinois State Board of Education

IT: Information Technology

IYC: Illinois Youth Center

IYS: Illinois Youth Survey

LEAD: Law Enforcement-Assisted Diversion

MAT: Medication-Assisted Treatment

NAS: Neonatal Abstinence Syndrome

NCCHC: National Commission on Correctional Health Care

NIDA: National Institute on Drug Abuse

NIH: National Institutes of Health

NSDUH: National Survey on Drug Use and Health

OCAPS: Office of Clinical, Administrative, and Program Support

OMT: Outpatient Methadone Treatment

Opioid STR: Illinois' State Targeted Response to the Opioid Crisis Grant

OD: Opioid Use Disorder(s)

PAARI: Police Assisted Addiction and Recovery Initiative

PDOA: Prescription Drug and Opioid Addiction

PMP: Prescription Monitoring Program

SAMHSA: Substance Abuse and Mental Health Services Administration

SFY: State Fiscal Year

SHIP: State Health Improvement Plan

SPA: State Plan Amendment

STEER: Stop, Triage, Engage, Educate, and Rehabilitate

SUD: Substance Use Disorder(s)

TASC: Treatment Alternatives for Safe Communities

WHO: World Health Organization

WNDTI: Westside Narcotics Diversion and Treatment Initiative

Endnotes

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